Small and Medium Enterprises Baseline Survey

Ukraine
1999

Developed and conducted by
Management Systems International
And
Development Alternatives Incorporated
In collaboration with
The Kiev International Institute of Sociology

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A Survey of Business in Ukraine

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EXECUTIVE SUMMARY

Introduction

The United States Agency for International Development in cooperation with the State Committee for Entrepreneurship Development recently commissioned a major survey of businesses and households throughout the Ukraine. A major goal of the project was to collect data that would enable the survey team to project the number of very small businesses in the economy. The survey would also provide information about the employment size and industry distributions of businesses producing goods and services for sale in a market. The activities of businesses in 12 major industry groups would be examined to identify problems, opportunities, and behavior in areas such as management activities, exports, employment, production, revenues, and expected changes in some of these variables. The survey team was also charged with identifying the most important problems faced by businesses of all sizes in the Ukraine. Given these problems, the team was asked to examine general solutions or to identify methods used in other countries to deal with similar problems. The team was also asked to compare the demographics of business in the Ukraine with business demographics in other developed economies in Western Europe and North America.

The Survey

The survey was developed and conducted by a team consisting of two American organizations, Management Systems International (MSI) and Development Alternatives Incorporated (DAI) working closely with the Kiev International Institute of Sociology (KIIS). The sampling plan for the survey called for surveys of approximately 5000 businesses drawn through a stratified (by employment size) random sample of businesses taken from State registration records. A survey of 4000 households was also conducted, based on clustered area samples taken at random sites throughout the Ukraine. Appendix A provides complete details on how the samples were developed.

The stratified random sample from the State data (hereafter called the “registry” sample) was to be used to identify the major distributional characteristics of businesses. The data on number of businesses from the state registry could then be used to project employment and industry distribution for the whole country. It was hypothesized that the state data would provide comprehensive coverage for medium and larger businesses, but might have less complete coverage of smaller businesses, particularly those businesses that were unregistered and operating in the “gray” economy. This hypothesis proved to be correct. The survey of 4000 households (hereafter called the “household” sample) provided supplemental data on very small businesses identified through almost 10,000 interviews with household members working for a firm or supporting themselves through self-employment. A self-employed individual (sometimes called a zero employee firm) is a business owned and operated by one individual. Since the individual is considered an owner of the business, he/she is not considered to be an employee. On the other hand, the owner is clearly providing employment for himself. In that sense the owner is counted as employed according to the definitions used in the Western countries.

The survey of firms from the registry sample provided quality information about the characteristics of firms registered with the local authorities and the tax authorities, when the firms in the sample could be found. Unfortunately, there were major problems in finding a significant minority of firms. More than 70 percent of small firms (with fewer than 50 employees) could not be found, and 40 percent of medium-sized firms and more than 20 percent of large firms from the registry sample could not be found when interviewers called or visited the addresses provided in the registry sample provided by the State Committee on Statistics.

Interviewers were given the address of each firm and the name of a senior manager.

When a firm in the sample could not be found, the field interviewers were instructed to check local directories, visit local authorities and speak to people in the neighborhood of the address they were given. In many cases the follow-up activities did not find the sample business. It appears that the registry had not been updated in some cases to reflect privatization, closure of a business, or some other change in business status. Many records were also incomplete lacking the employment data needed to derive the sample. Only 203,000 state records had employment data, for example, out of more than 600,000 records in the registry file.

The problems of incomplete or out-of-date records are frequently encountered in all major countries that attempt to maintain complete business registries. New businesses may not be registered immediately after startup. Businesses closed for some reason or legally merged with another business may not report this change of status to local authorities. Even when a report is made, the local authorities may not update national databases on a timely basis. Because it was difficult to find so many businesses, the 5000 interview target in the sampling plan could not be accomplished within the time period allotted for interviews. A total of approximately 4000 business interviews were completed. As noted these interviews produced excellent data about the operations of firms with 5 or more employees

The 4000 household interviews provided complimentary data on firms with zero employees or 1 to 5 employees. Taken together, the registry and household samples provided the data needed to project the total number of firms in the Ukraine, as well as total employment in firms producing goods and services.

The Questionnaire

The questionnaire developed jointly by MSI and DAI and the KIIS contained approximately 100 questions covering basic demographic information such as number of employees, full or part-time status of employees, hours worked, whether the workers were paid in cash or in kind and whether the payroll of the firm was current or in arrears. Other sections of the questionnaire dealt with identification of major business problems, recent sales and revenues, anticipated sales, and exports. Firms were asked about management practices, management assistance from outside consultants and membership in business organizations. The questionnaire included sections on registration, licensing and inspections by state agencies. One major section of the report asked owner/managers of firms to identify a “conceptual” firm so that they could answer questions about sensitive issues such as tax evasion, dealing with corruption, etc.

A team of almost 200 interviewers located throughout the Ukraine conducted interviews. Most interviews were completed in April and May 1999, although some interviews were completed in June. Data were coded and entered into a computer database, and checked for quality and correctness. Major tabulations were completed in July and August, and the report was completed in late September 1999.

MAJOR FINDINGS

Number of Businesses and Business Employment

Based on completed survey data, the report estimates that there are slightly more than 3,000,000 businesses operating in the Ukraine. Of these businesses, 2, 650,000 businesses are self-employed individuals supporting themselves by producing and/or distributing and selling products in local marketplaces. The distribution of firms and employment is shown in Table 1, below. Note that more than 3,000,000 businesses are small (50 or fewer employees), while only 33,169 are medium-sized (51-250 employees) and only 10,851 firms are large (more than 250 employees).

Table 1. Firms and Employment in the Ukraine, 1999

Employment Size Class	Projected Number of firms	Projected Employment	Percent of Firms Registered	Unregistered Employment
Zero	2,651,433	2,651,435	24.6	1,999,180
1-5	148,976	516,947	37.6	322,275
6-10	104,608	850,460	94.1	50,177
11-50	123,757	3,189,226	99.5	15,946
51-250	33,169	4,206,444	99.5	21,032
250+	10,851	9,822,542	99.4	58,935
Totals	3,073,244	21,237,054 (52.0 percent of the population age 15 and over)		2,667,545 (11.6 percent of the population age 15 and over)

Table Notes: The projection of firm numbers for the zero, 1-5, 6-10, 11-50, and 51-250 employee size classes are based on population data from the household portion of the survey project, projected to meet total population data and distributions taken from the State Census of the Ukraine for 1997. The number of firms in the 250+ size category is taken from data provided by the State Committee for Statistics. The numbers for the zero, 1-5, 6-10, and 11-50 size classes should be added to obtain the total number of small businesses. The numbers for the 51 to 250 employee size class represent medium-sized businesses. Businesses with 250+ employees are considered to be large businesses. The projected employment data is based on mean employment by size class of business based on interviews with registered businesses. The percent of firms registered for the firms with 0, 1-5, and 6-10 employees is taken from the household portion of the survey project. The percent registered for the 11-50 employee size class and for larger size classes is taken from the registry portion of the survey project, and based on samples provided by the Central Committee for Statistics.

The projected employment identifies 11.6 percent of employment in businesses producing goods and services for sale as employment in the underground or "gray" economy. The self-employed individuals who make up the largest portion of businesses in the Ukraine are providing an important service to the State and increasing national welfare by supporting themselves through their self-employment. Some of these "micro" firms will eventually grow into productive medium-sized and large businesses.

Reorganizing the data in Table 1, Table 2 shows that small and medium-sized firms together employ more people than large businesses in the Ukraine. This may be a major surprise to some State officials, and to many citizens used to thinking that large enterprises are the key to employment in the Ukraine. In most countries, however, small and medium-sized businesses account for anywhere from 50 percent to 90 percent of total employment. (See Section One of the report for more details)

Table 2. Employment and Percent of Total Employment by Employment Size Class of Business

Employment Size Class	Total Employment in Class	Percent of Total Employment
Small (Zero to 50 Employees)	7,208,068	33.9
Medium (51 to 250 Employees)	4,206,444	19.8
Large (250+ Employees)	9,822,542	46.3

State-owned and Controlled Businesses, and State Employment

The state is still a major factor in producing goods and services in the Ukraine. Counting employment only in those State enterprises producing goods and services for sale in the market, 6,400,000 people work for the State. Of these, 75.6 percent work in large enterprises and 15.7 percent work in medium-sized businesses. Just over 3,000,000 of the State workers are in the mining and manufacturing sector. Table 3 shows State employment as a percent of total employment by industry and by size of business.

Table 3. State Employment as a Percent of Total Employment, by Employment Size of Business and by Industry

Employment Size of Business	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
Small Zero to 50 Employees	9.0	10.0	1.3	9.3	4.1	15.0	9.5	2.0	7.5	14.5	2.1	8.1	7.7
Medium 51 to 250 Employees	20.5	15.5	25.8	17.9	10.7	33.8	46.1	59.0	19.4	58.0	26.3	40.3	24.2
Large More than 250 Employees	81.3	44.6	22.9	48.1	4.6	----	52.2	58.1	77.2	76.0	----	69.5	49.2
Total Employment	38.2	37.5	12.1	32.0	5.0	21.8	31.2	35.5	54.4	40.7	5.1	31.6	30.2

Table 3 raises a number of points. First, a comparison between the state share of employment in small businesses (the first row) and the state share of employment in large businesses (the third row) says that the state is much less active in the small sector of the economy. Put another way, smaller businesses represent the new, more dynamic, and probably faster growing portion of the economy. Second, the state share of large businesses in many industries is so large, that larger private businesses may be at a disadvantage to the state businesses in a number of industries, particularly if the state plays a major role in allocating scare inputs, providing input and export licenses, etc. The data described elsewhere in the report indicate that large businesses operate outside of a normal market economy in many ways, including bartering for inputs and for sales, and paying employees in kind. Smaller firms operate more like Western capitalist firms, purchasing inputs and selling goods for money rather than barter.

The Size of Firms in the Economy

While most firms in the economy are small, larger firms can be very large. The average employment by size class for four types of businesses is shown in Table 4, below.

Table 4. Mean (Average) Employment by Employment Size Class and Type of Business

Type of Business	EMPLOYMENT SIZE OF BUSINESS			
	Small Zero to 50 Employees	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
All Business	11.9	125	905.8	197.6
Privately-owned or Controlled	15.4	124.2	689	159.5
State-owned or Controlled	20.3	120.2	1232.3	516.6
Women-owned or Controlled	8.2	126.6	614.6	81.7

Large state-owned enterprises are very large, and the average state-owned enterprise (shown in the total column) is very large. The average women-owned business in the large size category is reasonably big, but the average women-owned business is much smaller than the average for All businesses or for all privately-owned or controlled businesses.

Differences Between Small and Large Businesses

While all businesses perform the same basic functions of producing, distributing and selling products and services, small, medium and large firms differ in many ways.

New Firms versus Privatized Firms

Most large private firms were previously not private. More than 70 percent of these firms had some prior form of ownership, and 70 percent of those firms with a prior form of ownership were privatized State enterprises. Only 22.8 percent of smaller firms had a prior form of ownership. Seventy-six percent of small firms are new startups, compared to only 17 percent of large firms (Table 1-8).

Paying Wages in Arrears and Paying Wages in Kind

Smaller firms are more likely to be current in their payroll, with 63 percent paying on a current basis. Only 29.2 percent of large firms (and 37 percent of medium-sized firms) are current in their payments to workers. More than 23 percent of large firms are six months or more behind in paying their workers, while only 9 percent of small firms are in this category (Table 2-10).

Large firms are also much more likely to pay workers in kind (i.e., workers are paid in units of the product produced by the company). More than 50 percent of large firms pay at least some workers in this manner, compared to less than 12 percent of small firms. Approximately 10 percent of medium-sized and larger firms pay more than 70 percent of their workers in this manner. Only 2.4 percent of small firms do this (Table 2-11).

Use of Barter to Obtain Inputs or to Sell Outputs

One significant area where smaller firms and larger firms differ is the use of barter to obtain inputs or to distribute outputs. Larger firms, and state-owned firms are much more likely to use barter to obtain inputs or to "sell" outputs. Approximately two-thirds of large firms barter for some inputs, for example, and almost one-third of large firms barter for 40 percent or more of their total inputs. Only 19 percent of smaller firms report bartering for inputs, and only 5.5 percent barter for more than 40 percent of their inputs. The percent of firms reporting the use of barter to sell goods is very similar. Large firms are several times more likely to be major users of barter to trade goods with other companies. One way of looking at the use of barter is that it is an inefficient way to buy or sell goods. Smaller businesses which pay cash for most purchases and require cash for most sales are operating in a more modern, and more efficient mode. This should help smaller businesses to grow more effectively over time (Tables 5-3, 5-4).

Exports

Larger firms are much more likely to export goods from the Ukraine, with almost 30 percent of larger firms reporting that they are exporters. Many of these large businesses export the majority of their output to Russia or to related states. Much of this trade probably involves barter (although this question was not asked) and such trade does not provide a source of "hard" currency to be used for purchasing vital machinery and equipment available only in the West. Very few small firms export goods or services. With a well-educated population, export opportunities can provide a good source of growth to the Ukraine, once outputs are brought up to and continue to meet developed country quality and design standards (Tables 6-1, 6-2).

Part-time Workers, Women Workers and Hours Worked

Part-time workers make up approximately 20 percent of workers in firms producing goods and services in the Ukraine. Part-time workers average about 20 hours per week, except in state-owned enterprises where they work an average of 25 hours per week.. These part-time workers are used more frequently in women-owned businesses, but are used more or less equally across other types of businesses. Women-owned businesses are also more likely to hire women workers. Women workers make up almost exactly 50 percent of the workforce. State-owned enterprises are slightly more likely to employ women than other types of firms (Tables 2-6, 2-7, 2-8).

Women-owned Businesses

Compared to Western countries, women own and control a larger percentage of medium-sized and large firms. Table 5 shows the ownership range.

Table 5. Percent of Businesses That Are Owned or Controlled by Women, By Size of Business

Type of Business	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
Number of Employees	Zero	1-5	6-10	11-50	All Small			
Percent Owned or Controlled by Women	50.1	26.8	26.5	21.0	30.0	12.7	13.0	23.4

Note: Own or control is defined as 51 percent more ownership.

The number of women-owned businesses has been increasing rapidly in the United States, and women now own or control approximately 40 percent of all U.S. businesses. Most of these businesses are small, however.

Registration

Only 37.9 percent of the zero employee firms claim to be registered with the State and this may be an exaggeration on the part of at least some firms. Approximately 89 percent of firms with 1-5 employees are registered. Firms with 10 or more employees are almost certain to be registered with the local authorities and the State Tax Authorities. Still, unregistered companies reported to interviewers that they employed approximately 11.6 percent of those employed in the Ukraine. This estimate is probably too low, but it does indicate that unregistered employment is important to total welfare in the Ukraine (Table 3-1).

Licensing

Licensing does not seem to vary significantly by size, with about 60 percent of businesses in all size categories requiring at least one license. Larger firms may have slightly more licenses, but the number of licenses appears to vary more by industry rather than by size. Eating and Drinking Place have larger numbers of licenses than other industries (Table 3-2).

Inspections by State Agencies

A large number of State agencies have the right to inspect firms and levy fines. Each agency can examine performance in the area that they regulate. Inspections have been a major burden to most businesses in the past, with the typical business reporting an average of 70 inspections per year. In late 1998 and early 1999, the number of inspections appears to have declined precipitously, partly due to a decree issued by the President, and partly due to changes in the approach and strategy used by many regulatory agencies. In the six months prior to the survey interview, owner/managers reported receiving only 10.6 inspections. This is a significant improvement that, hopefully, will continue in the future (Table 3-4).

Table 6. Average number of Inspections by State Agencies for the Six Months Prior to the Survey, By Employment Size of Business*

Type of Business	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251+ Employees	Total
Number of Employees	Zero	1-5	6-10	11-50	All Small			
All Business	3.6	5.5	7.6	9.9	7.1	13.2	19.4	10.6

* If the six-month rate were maintained for 12 months, this would imply an average of 21.2 inspections per year per business. This number compares favorably with earlier reports that placed the annual number of inspections at 70 or more. The numbers reported here are similar to the May, 1999 report of the International Finance Corporation (IFC), although not strictly comparable, since the months covered by the current survey (October 1998 through March 1999) do not completely overlap with the months covered by the IFC report. Both reports confirm a marked reduction in the number of inspections by State Agencies.

State officials also appear to be operating rationally in the sense that the smaller the business, the smaller the number of inspections; the larger the business, the greater the number of inspections. When the number of inspections is adjusted for number of workers, however, there are 0.28 inspections per worker in smaller businesses and only 0.02 inspections per worker in larger businesses. Smaller businesses, therefore, still face a relatively greater compliance burden than larger businesses. Time spent on interacting with inspectors is time that can not be spent on other, more productive activities. Smaller businesses must charge more for their goods and services in order to cover excess regulatory costs. This phenomenon has been noted in most Western economies, and a number of techniques have been developed to lower the burden of regulation, while still providing the regulatory authorities with the information needed to do their work effectively.

Major Problems Identified by Businesses

A discussion of registration, licensing, inspections, and fines is a natural lead into the larger question of what problems bother businesses the most. Businesses were asked to identify, from a list of about 15 possibilities, the single most important problem they faced. The results are shown in Table 7.

Table 7. Percent Reporting A Problem as The Most Important Problem Facing Their Business, by Employment Size of Business*

	EMPLOYMENT SIZE OF BUSINESS			
PROBLEM	**Small Zero to 50 Employees**	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
Existing Tax System	43.9	49.8	47.4	45.8
Lack of Working Capital	10.1	15.4	18.3	12.8
Low Market Demand for My Products	11.5	8.0	6.5	9.8
Legislative Conditions	7.2	7.1	6.2	6.1
Inflation	8.1	2.8	3.2	6.1
Administrative Controls by Public Agencies	2.8	1.3	1.1	2.2

* Several other problems were identified, such as obtaining credit, interest rates, shortages of raw materials, labor availability and cost, etc., but the very low response rates indicated that these items were not significant problems for Ukrainian businesses.

Three things are remarkable about this table. First is the almost overwhelming vote for the existing tax system as the single most important problem. Second is the fact that with minor exceptions, firms of all sizes and industries (See the full report) generally agree on the set of six problems that are highest ranked on the list of possible problems. The last remarkable point is that administrative controls by public agencies (registration, licensing, and inspections) while they may be bothersome, don't represent the most important problem for almost all businesses.

The tax system is particularly burdensome for smaller businesses with employees. Those small businesses that remain unregistered probably do this to avoid social security and health taxes which are very high relative to wages, at least when compared to U. S costs. But medium-sized and large firms also report that the tax system is the most significant problem, citing the multiplicity of taxes, the degree to which the tax law changes on a regular basis, and the need to support lengthy tax inspections at the business site.

Firms were also asked to identify the second most important problem facing their business (not shown). The same six problems identified as most important also headed the second most important list. Lack of capital and lack of demand for product are important problems for many businesses. The legislative situation appears to bother businesses more than administrative actions bother them. This was particularly true on the second list. Inflation as a major problem appears to affect smaller businesses more (Table 7-2).

Management Techniques and Methods

Managers were asked to say whether they used a variety of modern management techniques. Large firms were more likely to use such techniques than smaller firms as shown in Table 8.

Table 8. Percent of Businesses Reporting Certain Management Activities, by Size of Business

Has Your Business?	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Prepared a Detailed Written Business Plan?	15.8	21.6	28.0	34.6	28.6	48.0	61.9	40.1
Prepared a Request for Financing?	7.0	15.1	18.6	22.8	18.9	35.2	48.0	28.8
Conducted Formal Market Research?	13.3	29.1	38.9	36.8	34.1	42.2	48.8	39.0
Prepared a Written Marketing Plan?	6.1	14.0	18.0	20.8	17.6	26.9	37.2	23.8
Worked With a Business Consultant	7.9	10.8	16.2	14.9	13.8	18.5	23.2	16.8

Despite the fact that they reported doing better on use of these techniques, only one major management tool, the detailed written business plan, was used by more than 60 percent of large firms. No other major management activity was accomplished by as many as 50 percent of firms.

Very few firms (less than 10 percent) reported receiving management training courses, or help with preparing loan requests or assistance from a management consultant. The exceptionally small number of firms obtaining such assistance indicates that there is enormous room for improving management practice in the Ukraine (Table 4-2).

Use of Credit

Only one firm in five reports applying for a loan in the previous year. Of those requesting loans, only 41.4 percent were successful. Overall, only 8.2 percent of businesses applied for and obtained a loan in the year prior to the survey. Even fewer businesses report receiving any

assistance in learning how to apply for loans. Other sections of the report show that the economy operates primarily on a cash basis, with only about a third of firms reporting that they received any credit from suppliers.

Investment Purchases and Leasing

One area where credit can be vitally important is in the financing of plant, machinery and equipment to improve productivity or expand output capability. Firms were asked if they invested in a range of alternative items, and they were then asked if they used leasing to obtain some of these investment goods. Approximately 43 percent of firms indicated that they had invested in some goods last year. Sixty percent reported purchasing equipment, for example, and another 20 percent said they purchased a vehicle. Medium-sized and larger firms were more likely to purchase vehicles, but smaller firms reporting investing almost as frequently as larger firms in all other investment type goods.

Leasing of investment goods can be an effective way for businesses to economize on capital when starting or expanding a business. But leases in the Ukraine are used primarily for leasing buildings and land. Fifteen percent or fewer report using leases to obtain the use of vehicles or equipment or machinery. There is ample room to increase the use of leasing for these items. In recent years in the United States, leasing firms have targeted smaller firms and have developed the capability to provide several different types of leases for almost any capital or investment good used by firms. This has helped smaller firms reduce capital needs at startup.

Interviews and Subjects involving "Hypothetical" or "Conceptual" Firms

Several issues that were of interest in the survey involve activities that people are reluctant to talk about. Examples of such issues are tax evasion, "informal" relationships with government officials, and relations with "criminal" elements. To make it easier for the owner/managers being interviewed to talk about these activities, each interviewee was asked to think of (conceptualize) an entrepreneur who they new reasonably well. They were not to identify this conceptualized entrepreneur, but they were asked to answer a series of questions using the entrepreneur's firm as a basis for their response. Approximately 55 percent of those interviewed agreed to participate in this conceptual experiment. Several of the more interesting questions and answers are displayed below.

First, owner/managers were asked if they had ever heard of several kinds of illicit activities as shown in Table 9.

Table 9. Percent of Owner/Managers Reporting Whether They Have Ever Heard of Underreporting of Activities, Informal Relations with Public Officials, and Similar Activities, by Size of Owner/Manager/s Business*

Have You Ever Heard of Such Activity?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Yes	84.3	87.0	87.0	85.3
No	15.7	13.0	13.0	14.7
Number of Firms Reporting	1120	377	295	1792

*The question was very long, to ensure that the topic was placed in a proper context. The actual text of the question was: "When economic conditions in the country are hard, entrepreneurs are often forced to find a way out by underreporting his/her activities, establishment of informal relations with public officials, and use of other similar techniques. For development of a program of economic crisis one has to estimate the scale of such phenomena in general. Tell me please whether you have ever heard about such techniques of business activity?

The overwhelming answer was yes (85.3 percent). The interviewees were then asked what share of total taxes due their conceptual entrepreneur actually pays. Table 10 shows the responses.

Table 10. Percent of Owner/Managers Reporting What Share of Taxes Their "Conceptual" Business Owner Really Pays, by Size of Business

What Percent of Total Taxes do you Think the Entrepreneur Really Pays?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Hard to Say/Don't Know	26.6	27.9	18.6	25.5
1-10 Percent	7.4	7.2	11.2	8.0
11-20 Percent	6.8	6.1	6.4	6.6
21-30 Percent	8.1	6.4	10.2	8.0
31-40 Percent	2.5	3.2	2.4	2.6
41-50 Percent	13.2	10.3	14.2	12.7
More Than 50 Percent	35.5	39.0	36.9	36.4
Number of Firms Reporting	1117	377	295	1789

Several points should be noted. Even though they were talking about a company that was unidentified, about a quarter of the respondents chose not to answer the question. Two-thirds of

the respondents said that the firm they had in mind paid less than 50 percent of the taxes due. About one-quarter of the respondents said that less than 30 percent of the taxes due were paid. These estimates indicate the extent to which business owner's work to evade the tax system. The energy and time spent doing this decreases the time available for other more productive business activity.

Owners were then asked to estimate what percent of taxes due could be paid without doing harm to the business making the tax payments. The answers to this question are shown in Table 11, which compares these answers to the last column of Table 10.

Table 11. Percent of Owners Reporting the Proportion of Total Taxes Collected from an Entrepreneur, and the Proportion That Could be Collected Without Harming the Entrepreneur's Business

	What Percent of Total Taxes Are Actually Paid?	What Percent of Total Taxes Could be Paid Without Harm to the Company?
Hard to Say/Don't Know	25.5	15.8
1-10 Percent	8.0	14.1
11-20 Percent	6.6	16.9
21-30 Percent	8.0	22.8
31-40 Percent	2.6	8.1
41-50 Percent	12.7	13.7
More than 50 Percent	36.4	8.5

In the previous table the respondents said that 36.4 percent of firms paid more than 50 percent of the taxes due. Here in the last column, they report that only 8,5 percent of firms could pay this much without harming their businesses. The inverse relationship holds for every other percentage category, with the exception of the 41 to 50 percent category where the respondents indicated that the percent of firms actually paying this percentage and capable of doing so without harm was about the same.. For example, 8.0 percent of firms were estimated to pay 1-10 percent of taxes due, but the respondents thought that 14.1 percent could pay this much without hurting the firm. This implies that most business owners still think they are paying to much in taxes, despite the success they report in paying only a relatively small proportion of what is due under the current tax system.

One last point on taxes is that 80 percent of firms responding to this section said that they could not survive without informal relations with public officials. When asked which officials, the tax authorities were named approximately three and one/half times as often as the police, and approximately twice as often as the local authorities.

Finally, the owner/mangers were asked what percent of profit their conceptual entrepreneur would have to pay to government officials. The answers are shown in Table 12.

Table 12. Percent of Owner/Managers Reporting What Percent of Profits Their "Conceptual" Entrepreneur Has to Pay to Representatives of Public Agencies, by Employment Size of Owner/Manager's Business

What Percent of Profit Has to be Paid to Officials of Public Agencies?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
None	33.8	34.0	23.3	32.2
1-9 Percent	18.3**	9.2	17.4	16.3
10 Percent	23.4	24.4	20.7	23.2
11-20 Percent	14.7	28.8***	17.3	15.3
21-40 Percent	6.8	10.5	19.3#	9.4
50 Percent or More*	4.2	6.3	2.0	4.3
Number of Firms Reporting	619	209	150	978

* Respondents were free to choose any percentage between zero and 100 percent. No Respondent suggested a share of profit between 40 and 50 percent. One Respondent chose one-half of one percent. This response is not shown in the Table above, since it is midway between the first two Percentage Categories.

** Approximately one-half of these responses were clustered at 5 percent. This proportion is representative for all of the responses in this row.

*** The majority of responses in this row are clustered at 15 percent and 20 percent. Almost 23 percent of medium-sized business owners specified 20 percent.

Approximately two-thirds of the 19.3 percent was at the 30 percent level.

This table is particularly discouraging because it speaks about how extensive corruption is in the Ukraine. The payments reported here reflect another insidious and extralegal form of taxation. This is one reason, perhaps that the complaints about the tax system are so loud. Between formal taxes, payments to officials and payments to criminal elements, the business owner is taxed three times. It is clear that these payments represent a major disincentive to owners attempting to make their businesses grow in the Ukraine.

Last Thoughts, The Major Problem Revisited

Many of the activities documented in the survey report show that businesses are trying their best in the Ukraine to develop and grow. There are major hurdles in their way, many of which are direct consequences of government action or inaction, and some of which are due to more natural causes. The government can work to create and strengthen an "enabling environment" for businesses in general and smaller businesses in particular. The response will be increases in employment and welfare and a stronger economy in the Ukraine. The shift from the current environment with excessive taxes, excessive corruption, and lack of macroeconomic stability will take a major change in the attitudes of Parliamentarians, government officials, and business

people. Business owners, including smaller business owners must learn how to represent their interests before the government or they will continue to be harassed by poor legislation and excessive government regulation of business.

The full report of the survey contains many more items of general interest to those who care about business in the Ukraine. This Executive Summary provides a brief description of some of the most important points. The full report provides much additional information on the questions discussed here and on numerous other questions.

INTRODUCTION

Management Systems International (MSI) and Development Alternatives Inc. (DAI) have managed a number of small and medium-sized business support and development activities in the Ukraine in recent years. In 1998 they were approached by the United States Agency for International Development (USAID) and the State Committee for Entrepreneurship Development (SCED) to develop a database describing business activity in the Ukraine. The database would be used to provide a better understanding of the role of small and medium-sized enterprises in the Ukrainian economy. A key goal was to attempt to better define and measure the role of very small businesses in the economy, including those businesses that were not registered officially with state or local authorities. Better information about the number of businesses, and their distribution by size, industry and geography would assist government officials, multilateral and bilateral aid agencies, and NGO's attempting to improve service delivery to the small and medium-enterprise (SME) sector.

The database was developed through a major survey of both businesses and households throughout the Ukraine. Approximately 4000 interviews were held with owners or managers or businesses identified through a stratified random sample of businesses taken from a business register maintained by the State Committee for Statistics. An additional 4000 interviews were completed with households throughout the Ukraine using area sampling techniques developed by the Kiev International Institute for Sociology (KIIS). Almost 10,000 individuals age 15 or over were interviewed as part of the household interviews. Finally, a cluster sample of 1000 "street enterprises" was completed. A street enterprise is any business that a consumer would identify by walking through a randomly-selected commercial area. Full details about all of the survey samples can be found in Appendix A, The Ukraine SME Survey, Methodological Report.

The questionnaire, attached as Appendix B, consisted of almost 100 questions covering firm demographics, firm employment practices, firm relationships with state authorities including registration, licensing and inspections, firm management practices, and firm economic activity in the recent past, and expected activity in the near future. A final section of the questionnaire asked the firm owner or manager being interviewed if they would conceptualize an entrepreneurial firm, the firm not to be identified, and answer a set of questions relating to tax payments, tax evasion, official corruption, and criminal activity. By asking the respondent to provide answers in terms of an unidentified (conceptual or hypothetical) firm, it was expected that more honest and open answers would be provided.

The questionnaire was pretested and revised prior to the training of the approximately 200 interviewers who conducted the field interviews. Interviews were held primarily in April and May 1999, with some additional interviews completed in June 1999. Data from the interviews were coded and entered into an SPSS database during May, June and July, 1999, and random follow-up interviews were conducted to ensure that the data had been reported and coded correctly. Major tabulations were completed in August, and the report was written during late August and September, 1999.

Thomas A. Gray wrote the project report and coordinated activities throughout the project. William B. Whiston prepared the projections of firm numbers, employment numbers and distribution by size and industry for the Ukraine. Full details of the methodology used for the

projections are found in Appendix D. Mr. Whiston also prepared Appendix C which provides projections of the number of enterprises and employment by size and industry for five regions of the Ukraine. A large number of people actively contributed to the project. Russ Webster of MSI provided professional guidance throughout the project, and Michael Carnazza of MSI provided administrative support. Neal Nathanson, Paige Snider, Carrie Averch and Marina Mutchler of DAI assisted with the identification of Ukrainian partner organizations and with the development of the questionnaire, the training of field staff, and the monitoring of the interview process. Valeriy Khmelko, President of KIIS contributed the "conceptual firm" approach and provided professional guidance at several points. Volodymyr Paniotto, Director of KIIS was the key interface on all technical issues related to the design and implementation of they survey. His great knowledge of statistical sampling methodology and survey practice greatly improved the project. Olena Popova of KIIS provided strong support throughout the project, and was responsible for much of the day-to-day detail of the data collection. She provided exceptional support in providing complex cross-tabulations and related data analyses.

Svetlana Gornaya of MSI/Kiev provided general administrative support in Kiev throughout the project. She provided translators as needed, oversaw the development of the Ukrainian version of the report, and provided other necessary contract support. Her capacity for handling interactions with various government agencies and with other parties to the report, and her overall attention to detail made the project move very smoothly. Both Jeff Houghton and Joe Welsh of the DAI NewBizNet project provided administrative support as needed and provided a base of operations in Kiev.

Steven Silcox of USAID provided clear guidance throughout the project. He helped with strategic planning, and provided valuable guidance in dealing with Ukrainian officials and with members of other embassies, multilateral and bilateral aid organizations, and USAID contractors. Ivan Shvets of USAID assisted throughout the project and helped resolve several critical logistical problems. Donna Nails of USAID helped to focus questions on women's business issues, and provided encouragement throughout the project.

Ms. Olexandra V. Kuzhel, Head of the State Committee of Ukraine for Entrepreneurship Development and a member of the Cabinet of Ministers of the Ukraine was an important supporter throughout the project. She and her staff provided assistance in a number of ways. The final report is intended to provide the SCED with information to assist with their program development activities in support of smaller enterprises in the Ukraine.

This report has been produced in both an English language and a Ukrainian language version. It is hoped that the Ukrainian version captures the full spirit of the English version. In cases of ambiguity the English version should prevail.

Throughout the report the data provided by the survey is used to highlight issues, problems, or opportunities to improve the position of smaller enterprises in the Ukraine. Policy recommendations are made in the most general way possible and frequent comparisons are made to the role of SME's in Western Europe, the United States and Japan and to the policy positions adopted in those countries. The views and opinions related to policy issues or any other issues raised in the report are those of the authors. These opinions do not necessarily reflect the position of the United States Agency for International Development.

This project was supported through funds provided by the United States Agency for International Development.

I. THE DEMOGRAPHICS OF BUSINESS IN THE UKRAINE

The demographics of business in the Ukraine deal with the numbers and categories which describe the size and shape of the business population in the Ukraine. Although this report is most concerned with smaller businesses in the Ukraine, the data presented in this section describe businesses of all sizes, all industries, and all forms of business ownership. This broad spread of information enables us to make important comparisons between businesses of different sizes, industries, and forms of ownership.

The report also separates the general population of businesses into five sub-populations called types of businesses. These types include All Businesses, Private Businesses, State-owned or Controlled Businesses, Women-owned or Controlled Businesses, and Men-owned or Controlled Businesses. Time and space permitting, almost all elements of the report can be sorted to allow comparisons such as private business versus state-owned businesses or women-owned vs. male-owned businesses. These comparisons would make an extremely long and confusing report, however. Several tables will be presented to show the basic differences in the number of businesses by type of business, the industrial distribution of businesses by type of business, and the distribution of employment by type of business. Appendix tables will also show the distribution of businesses by business size and industry for the five major regions of the Ukraine.

A. THE NUMBER OF FIRMS AND THE DISTRIBUTION OF EMPLOYMENT BY FIRM SIZE

A major question of interest to both the State and the business community is the number of businesses in the economy. A related question asks how these businesses are distributed by size. The knowledge of these two variables, and of related variables such as the distribution of businesses by industry or by type of ownership, provides a base for policy-development activities affecting businesses. This knowledge also helps private businesses attempting to market goods and services to other businesses. State and private efforts to provide support services or programs to smaller businesses are crucially dependent on knowledge of how businesses are distributed by size and by industry.

The number of businesses projected for the Ukrainian economy, distributed by the employment size of businesses is shown in Table 1-1, below. The Table also provides projected employment by size of business and by registration status of business

Table 1-1: Firms and Employment in the Ukraine Based on a Survey Conducted During the Second Quarter, 1999

Employment Size Class	Projected Number of firms	Projected Employment	Percent of Firms Registered	Unregistered Employment
Zero	2,651,433	2,651,435	24.6	1,999,180
1-5	148,976	516,947	37.6	322,275
6-10	104,608	850,460	94.1	50,177

11-50	123,757	3,189,226	99.5	15,946
51-250	33,169	4,206,444	99.5	21,032
250+	10,851	9,822,542	99.4	58,935
Totals	3,073,244	21,237,054 (52.0 percent of the population age 15 and over)		2,667,545 (11.6 percent of the population age 15 and over)

Notes: The projection of firm numbers for the zero, 1-5, 6-10, 11-50, and 51-250 employee size classes are based on population data from the household portion of the survey project, projected to meet total population data and distributions taken from the State Census of the Ukraine for 1997. The number of firms in the 250+ size category is taken from data provided by the State Committee for Statistics. The numbers for the zero, 1-5, 6-10, and 11-50 size classes should be added to obtain the total number of small businesses. The numbers for the 51-250 employee size class represent medium-sized businesses. Businesses with 250+ employees are considered to be large businesses. The projected employment data is based on mean employment by size class of business based on interviews with registered businesses. The percent of firms registered for the firms with 0, 1-5, and 6-10 employees is taken from the household portion of the survey project. The percent registered for the 11-50 employee size class and for larger size classes is taken from the registry portion of the survey project, and based on samples provided by the Central Committee for Statistics.

Interpreting Table 1-1 requires knowledge of basic definitions. What is a zero employee business, for example? A zero employee business is a business with one owner, and with no hired employee(s) at the time the business interview is conducted. The owner of the business is not considered an employee, but is described in terms of the ownership role. In most economies the number of zero-employee businesses is very large relative to the number of businesses with employees. The Ukraine is similar to many Western economies in this respect. Based on responses from the 4000+ business interviews and the 4000 household interviews conducted as part of this survey, it is estimated that there are more than 2.6 million zero employees businesses in the Ukraine. Only one/fourth of these zero employee businesses are estimated to be registered with the State or Local Authorities.

The estimate of the number of zero-employee businesses is derived from the household interviews, and is based on the number of individuals who, when interviewed, described themselves as self-employed. A person is considered to be self-employed if he/she earns the major portion of his/her income from sale of goods or services in a market to three or more buyers.[1] A self-employed individual may also work as an employee receiving wages from an employer, but the majority of a self-employed person's income must come from the sale of goods or services in an open market. A self-employed individual represents the smallest and most basic form of business. Self-employed individuals are critical elements of the business community. Even though they consist of only one individual, that individual must successfully carry out all of the basic management functions common to all businesses. These functions include planning, production, marketing, and accounting. In a well-structured and healthy

[1] This is basically an American definition, but a very similar definition is used by the countries of the European Community, and the Organization for Economic Cooperation and Development (OECD). The World Labor Organization (WLO), an element of the United Nations also uses a similar definition.

economy, a relatively large number[2] of self-employed individuals will add employees within a year or two. Some of these businesses will continue to grow from small businesses into medium-sized and large businesses over time. It is a basic fact that virtually every large business in the United States started as a very small business.

Note that total employment in the market sector of the economy is projected at just over 21,000,000 people. This number does not include employment on farms, in government bureaus, and in social service institutions such as schools, hospitals, and government-sponsored research institutions that are not selling goods and services for a price in a market of some sort. The number of firms is projected from employment by size-of-firm data collected as part of the 4000 household interviews conducted as part of the survey. Each household was asked to identify each household member age 15 and over and indicate whether that person was in the labor force (working or unemployed and looking for work, or out of the labor force (retired, student or someone not seeking work) It was thought that the number of firm projections could be developed from the number-of-firms data supplied to the research team by the State Committee for Statistics. When projecting from the state totals for number of firms by employment size class, however, the total employment projected was greater than the total population of the Ukraine. This would imply that the State totals for numbers of firms by size class is too large. This finding was confirmed by the difficulties encountered by field interviewers, who were not able to physically find many of the companies identified in the size-stratified random samples provided to the project by the State Committee for Statistics.[3] See Appendix ____ for full details. It was decided that it was prudent to project the number of firms on the basis of the employment size data from the household interview, with the exception of the large business category which was projected on the basis of the State registry.

B. THE BASIC BUSINESS POLICY PROBLEM IN THE UKRAINE

Business growth is a dynamic and complex phenomenon. Some businesses start and grow for a short time and become stable as a small business with a few employees. Some businesses continue to grow for many years, or grow very rapidly and become medium or large businesses very quickly. The increase in employment from these businesses is offset, however, because other business startups fail and go out of business, and other businesses with employees lose employment over time, if they don't remain competitive. In the Ukraine there is ample evidence that zero-employee firms are not growing, and not adding new employees. There is extensive

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[2] In the United States between 10 and 12 percent of these businesses will add employees in a given year.

[3] The State Committee was asked to provide a stratified (by employment size) random sample of firms from the State Tax Database. 15,000 firms were drawn on the first sample, but about 10 percent of these were deleted because the "businesses" identified did not meet the test of producing a good or service for the market place. So many of the remaining firms could not be found, even after extended search by the field interviewers, that an additional sample had to be requested. Even with the supplemental sample, it was not possible to accomplish the total of 5000 business interviews that was a major target for the field interviewers. In order to complete the report, it was necessary to truncate field interviewing after 3900 interviews were completed. The poor quality of the State statistics is not surprising. Every country has trouble tracking businesses on a dynamic or real time basis, because the smaller the business, the more difficult it is to recognize it and track it when it is started or when it goes out of business. The fact that many of the very small businesses in the Ukraine wish to stay unregistered makes the identification task all the harder.

evidence from the United States and from many European countries that smaller businesses provide the majority of new jobs in the economy over time. For example, Table 1.2, below shows job change in the United States for the years 1990-1995.

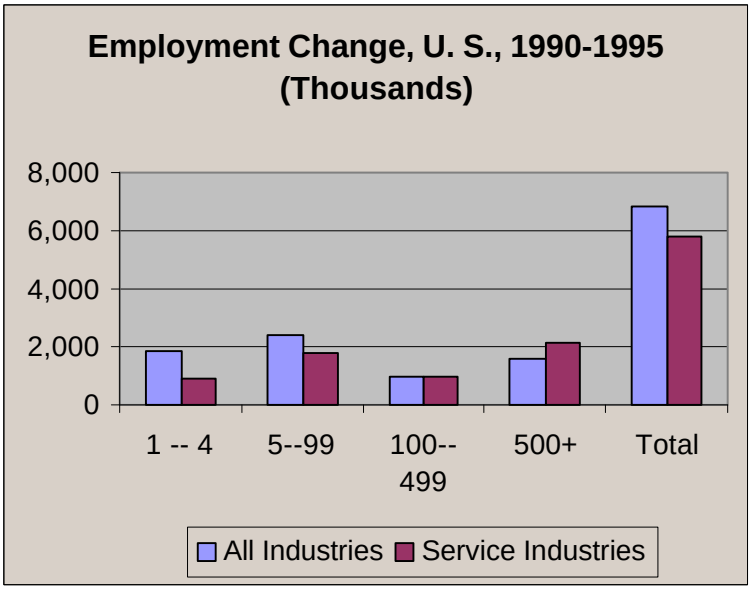
Table 1-2: Employment Change by Employment Size Class of Firm for the United States (Thousands), 1990-1995

Industry	Employment Size of Firm						
	1-4	5-9	10-19	20-99	100-499	500+	Total
All Industry	1,880*	864	617	940	941	1,612	6,854
Service Industries	880	437	390	937	972**	2,164	5,810

* To obtain employment change in each cell, add three zero's to the right of the number in the cell. Businesses with 1-4 employees in the All Industry cell added 1,880,000 jobs to the economy between 1990 and 1995.

** Note that job growth in the 100-499 employee cell for service industries shows a greater increase in employment (972,000) than the 100-499 employee cell for All Industries (941,000). The goods-producing industries (manufacturing, mining, agriculture, forestry and fishing, and construction) must have lost 31,000 jobs over the five-year period.

Figure 1-1: Employment Change, U.S., 1990-1995 (Thousands)



The U.S. economy added 6,854,000 jobs in five years. This number is lower than the normal 10,000,000 jobs that would be created in a five-year period. The U.S. economy was in a recession for approximately 18 months during the five-year period, and this reduced total job growth. Note where the job growth is coming from, however. Micro businesses (in this case businesses with 1-9 employees) produced 2,744,000 net (after adjusting for job losses) new jobs. Other small and medium-sized businesses (those with 10-499 employees) produced another 2,498,000 net new jobs. Larger businesses with more than 500 employees produced only

1,612,000 net new jobs.[4] The importance of the very small firms to the job generation process is typical in the United States and in many of the European economies. One major policy problem for the Ukrainian government is to explain why the Ukrainian economy is not currently increasing employment, particularly through the expansion of some small firms and the birth of other small firms. Many factors contribute to the slow job growth including a burdensome tax system, inflation, an unstable currency, lack of competitive markets for rental space and improved buildings, a poor distribution of capital resources between larger and smaller businesses in the economy, a general shortage of working capital, a poorly-functioning banking system, and the expectation on the part of most Ukrainian business owners that there will be little or no growth in the immediate future. This report will highlight the evidence identifying these factors, and some suggestions for productive policy changes will be made.

C. THE DISTRIBUTION OF EMPLOYMENT AMONG SMALL, MEDIUM-SIZED, AND LARGER BUSINESSES

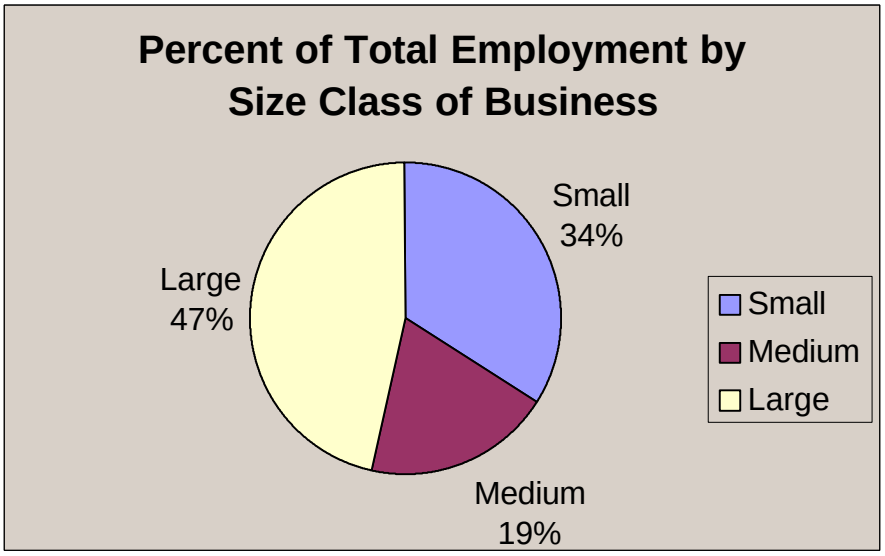
The Ukrainian economy may not be exhibiting dynamic growth in the number of businesses and in overall employment when compared to U.S. growth, but there are similarities between the distribution of employment in the Ukraine, the U.S. and many European countries. Table 1-3 shows the distribution of employment within the Ukraine by employment size of business.

Table 1-3: Employment and Percent of Total Employment by Employment Size Class of Business

Employment Size Class	Total Employment in Class	Percent of Total Employment
Small (Zero to 50 Employees)	7,208,068	33.9
Medium (51 to 250 Employees)	4,206,444	19.8
Large (250+ Employees)	9,822,542	46.3

[4] The emphasis here is on net new jobs, because in a dynamic economy the number of job losses and job gains is much greater than the net change in employment. Taking 1995, a major expansion year as an example, the economy gained 16,357,000 new jobs to due to expansion of some businesses (10,500,000), and births of new businesses (5,800,000). These gains were offset by the loss of 8,200,000 jobs due to the contraction of some businesses, and the loss of 3,500,000 jobs due to the closure of some businesses (all numbers are rounded to simplify the exposition).

Figure 1-2: Percent of Total Employment by Size Class of Business



The immediate and perhaps surprising conclusion from this table is that small and medium-sized firms already account for more than half of the employment in the Ukrainian economy. This surely goes against the conventional wisdom, which says that large firms should dominate production and employment in the Ukraine. The distribution shown here is very similar to that for the Western European countries. Table 1-4 shows the similarities.

Table 1-4: Distribution of Employment (Percent) by Employment Size Class and Country, 1986

Country	Employment Size of Business				
	Micro 0-9 Employees	**Small 10-99 Employees**	**Medium 100-499 Employees**	**All SME's 0-499 Employees**	**Large 500+ Employees**
European Community*	26.9	28.3	16.7	71.9	28.1
Spain	41.4	36.5	24.1	91.9	10.1
Italy	40.3	33.2	9.4	82.8	17.2
Portugal	38.1	27.8	14.5	80.2	19.8
Luxembourg	26.4	29.9	19.5	75.7	24.3
Belgium	31.0	26.1	14.6	71.5	28.5
United Kingdom	23.3	24.0	22.9	70.0	30.0
Germany	18.3	27.4	18.7	64.2	35.8
Netherlands	19.5	26.0	16.0	61.3	38.7
France	19.5	26.3	15.4	60.9	39.1

* In 1986 there were 12 countries in the European Community. Although data from 1986 may appear out-of-date, size distribution data changes relatively slowly over time. Distributions may change more

quickly in the Ukraine because the transition from the Socialist form to the Capitalist form is still ongoing.

The European countries seem to be even more concentrated in the SME sector than the Ukraine, but the EC data is for firms up to 499 employees, while the Ukraine distribution is for firms with 0 to 250 employees. The U.S. distribution of employment for 1993 shows 12.6 percent of employment in the 0-9 size category; 27.5 percent in the 10-99 size category, and 14.6 percent in the 100-499 size category. Large firms have 45.5 percent of the employment in the United States while aggregate SME employment is 54.5 percent of total employment. In at least one respect, therefore, Ukrainian employment looks similar to Western employment.

D. THE DISTRIBUTION OF FIRMS BY SIZE

Several other important points should be noted in the firm and employment projections. The number of businesses in the 1-5, 6-10, and 11-50 employment size categories is lower than might be expected in other economies. The number of firms in the 11-50 employee size range is greater than the number in the 6-10 employee size range. This might be construed as saying that scale economies favor firms in the 11-50 employee range more than smaller firms, but it is much more likely that this is an artifact created by the way in which the larger small firms were created during the move away from State ownership of all firms. A comparison with the U.S. firm size distribution helps to make the point.

Table 1-5: Distribution of Firms by Employment Size Class, for the Ukraine, 1999, and the United States, 1993

	Employment Size Class				
	Zero* Employees	**Micro 1-10 Employees**	**Small** 11-50 Employees**	**Medium # 51-250 Employees**	**Large ## 250 + Employees**
Ukraine	2,651,433	253,584	123,757	33,169	10,581
United States	----	3,430,000	1,006,000	71,512	14,629

* No zero employee number is shown for the United States. The United States has about 11.3 million self-employed individuals, but this includes 2.5-3 million individuals who have employees. The United States also has approximately 11 million additional firms that look like self-employed firms, but these firms do not constitute the main source of income for the business owner. There is a strong tradition of wage workers also running a small business as a secondary income production source. Rather than try to go into all the definition conventions, it is simpler to show no number for the zero employment category in the U.S.

** In the United States, the Small category, as shown here, includes firms with 10-99 employees, while the Micro category is 1-9 employees. Although the small definition is significantly different from the Ukrainian definition of zero to 50 employees, it will not affect the main argument presented through this table.

A similar statement can be made for the medium-sized category in the U.S., which encompasses businesses with 100-499 employees, compared to 51-250 employees in the Ukraine. The definitional difference will have no affect on the argument supported by the Table.

The Large size category also is different for the U.S., where large means 500+ employees.

Source: The U.S. Data is taken from The State of Small Business, A Report of the President, 1996, U.S. Government Printing Office

In the 1-10 employee class, the United States has roughly 13 times as many businesses as the Ukraine. In the 11-50-employee class, the ratio is roughly 8 to 1. The United States has roughly five to six times the population of the Ukraine. A ratio of 13 to 1 or 8 to 1 suggests, therefore that there are more small businesses per capita in the United States than in the Ukraine. This is not unexpected. The United States has been an open market economy for several hundred years, and it is reasonable that the small business sector be stronger than in the Ukraine because of this. But the Ukraine has been in transition for almost 10 years now, and it is producing large numbers of new businesses only at the zero employee level. The U.S. data suggests that there should be many more businesses in the Ukraine in the 1-5. 6-10, and 11-50 employee size classes. Although it is not possible to measure the rate of business startups with only one survey, a follow-up survey in the next year could provide strong evidence about how fast new businesses are being created. This information can certainly assist government policy makers in examining the efficacy of government policies in support of business development. Although the comparisons are more difficult because of the complexity of business statistics in the United States, the United States has approximately 10 times as many self-employed (including both full-time and part-time businesses) as the Ukraine. With more than 2.6 million self-employed in the Ukraine already, there is ample evidence that the Ukrainian people will start businesses, if encouraged by demand conditions, availability of capital, and meaningful government support.[5]

[5] Many of the existing very small businesses have been started because of the lack of opportunity in the wage sector, or because of the inability of state-owned enterprises to keep workers productively employed. Small businesses can begin because of the pull of opportunity in a dynamic market, or because of the lack of opportunity in the job market.

Figure 1-3: Interpretation of the Data

INTERPRETATION OF THE DATA

The tables in this report are based upon interviews with nearly 4,000 firms and nearly 10,000 family members, employees and entrepreneurs interviewed in 4000 households. The magnitude of the survey ensures robust estimates for most major projections. (The statistical term "robust" refers to the reproducibility of an estimate upon repeated samplings.) When attempts are made to make inferences from subdivisions of the data, some caution is appropriate.

If one cell in a table conveys information different from what would be expected from the row and column trends, it would be unwise to make a policy decision based upon this single number unless there were a reasonable number of answers falling into that cell. The number of answer counts in a cell sufficient for a decision is related to the cost of making a wrong decision. In general, one would like to see thirty or more answers in the cell before calling attention to it alone. For major expensive policy decisions as many as 300 answers might be required. In many of the tables in this report, the total number of observations is recorded by column and row totals. Cell counts can be estimated by using the row and column percentages that may be given for each cell.

One can gain cell count by combining similar industries, by pooling all districts, or even by combining adjacent employee size classes. Another common technique is to scan the trends along the column and row pertaining to that cell. If the trends are fairly even across the cell, scanning either or both the rows and the columns, the cell counts along the row and/or column can be combined. This procedure reinforces the message contained in the single cell, even though the count in that cell may be less than desirable.

Some additional insight into the size distribution of smaller businesses in the Ukraine can be developed by investigating where the existing businesses came from. One question in the survey asked firms to indicate whether they had ever had a different form of ownership than the existing one. The answers to this question are tabulated in Table 1-6. below.

Table 1-6: Percent of Firms Reporting a Different Form of Ownership Prior to the Current Form of Ownership, by Employment Size of Business

Did Your Firm Have a Different Form of Ownership Prior to the Current Form?	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Yes	0.7	9.6	25.0	43.4	22.8	59.9	69.8	39.2
No	99.3	90.4	75.0	56.6	77.2	40.1	30.2	60.8
Number of Firms Reporting	591	627	525	985	2728	945	817	4490

The table reveals some major differences between small and large businesses. For example, 99.3 percent of zero employee businesses report no prior form of business ownership. Larger businesses with more than 251 employees indicate that almost 70 percent had a prior form of ownership. Both medium and large firms are much more likely to have been created from some pre-existing business, while smaller firms are much more likely to be entirely new businesses. This is not surprising, since many of the medium and large firms are probably derived from previously existing state-owned firms. This is confirmed by examining the prior form of ownership for existing companies in Table 1-7, below.

Table 1-7: Percent of Businesses Reporting Prior Form of Ownership, by Employment Size of Business

Prior Form of Ownership Was:	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Private Enterprise	33.3	----	2.3	1.9	1.9	0.5	0.2	0.9
Collective/Joint Stock	----	27.1	13.8	12.2	13.9	5.1	3.0	7.5
Joint Venture	----	3.4	1.5	1.4	1.6	0.5	0.5	0.9
State-owned	66.7	64.4	69.2	74.6	72.4	86.7	88.8	82.4
Leased	----	1.7	3.8	4.0	3.7	3.5	6.2	4.5
Other Form of Ownership	----	3.4	9.2	5.9	6.3	3.5	1.4	3.8

A = Number of Businesses Reporting on This Question	3	59	130	425	617	565	569	1751
B = Total Number of Businesses Interviewed for this Survey#	591	623	523	974	2711	974	815	4458
C =(A/B)*(100) = Percent of Businesses with Prior Form of Ownership	0.5	9.5	24.9	43.6	22.8	58.0	69.8	39.3

Total Number Interviewed taken from Question 7 (Table 1-10).

The columns in the Table show the distribution of responses by size of business. The rows show the prior ownership form. Perhaps the most interesting area of the table is the row dealing with businesses that were formerly owned by the State. For large firms, 88.8 percent report that they were formerly State-owned businesses. Medium-sized businesses are almost as likely to have been state-owned, with 86.7 percent reporting prior state ownership. Even many of the larger small businesses, those with 11-50 employees, are likely to have been derived from prior state ownership.[6] One major implication of the prior state ownership is that the medium and large firms that were created from former state assets have a much stronger asset base than the smaller firms which have been started, for the most part, from private savings. Other sections of this report will show how this conversion of state assets favored medium and large businesses, and continues to provide these businesses with advantages that, perhaps unfairly, help them compete against smaller or newer businesses.

Another way of looking at where existing businesses came from was to ask the business owners whether they have a newly created business, a privatized business, or a business that has been separated from a previously existing State-owned or private enterprise. The answers are shown in Table 1-8.

[6] Even the smaller small businesses, those with 0-10 employees appear to have been derived from prior state ownership. But this is deceiving. Businesses with 6-10 employees, that reported a prior form of ownership, were likely to have been created from a government enterprise, but looking at row C at the bottom of the table shows that only 25 percent of the firms in this size class had any prior form of ownership. More than 70 percent of businesses with 6-10 employees were created through startup of new businesses. More than half of the firms in the 11-50-size class show no prior form of ownership in line C.

Table 1-8: Percent of Firms Reporting How They Originated, by Employment Size of Business

Your Enterprise	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Is a Newly Created Enterprise	99.0	88.2	73.1	53.9	75.8	26.9	16.7	58.5
Has Separated From a State-owned Enterprise	0.5	3.3	6.9	13.1	6.8	15.9	10.9	9.2
Was Privatized	0.5	4.9	14.3	25.6	12.9	51.1	68.7	29.6
Has Separated From an Other Enterprise	----	3.6	5.7	7.4	4.5	6.1	3.7	4.7
Number of Firms Reporting	589	608	490	907	2594	788	671	4053

The information in this Table reinforces the difference between small businesses and medium and larger businesses in the Ukrainian economy. Only 1 in 6 large businesses and 1 in 4 medium-sized businesses are newly created enterprises. In contrast, 3 out of 4 small businesses represent new businesses. Seventy percent of large businesses, and more than half of medium-sized businesses were privatized state enterprises, while only 13 percent of small businesses came from privatization. In terms of the dynamics of business growth, most small businesses have to organize themselves to meet the test of the marketplace. Most medium and larger businesses were already organized when they started their private activities. Smaller businesses had to pass a much more rigorous test in order to start their activities. In a competitive world, this might be viewed as a negative, but it is possible that the newly created smaller enterprises are more capable and more competitive than the firms privatized by the state. One implication that follows from this is that smaller enterprises should grow more quickly than privatized enterprises. A follow-up survey should be able to test this proposition.[7] The medium and large firms are taking steps to better organize themselves. Sixteen percent of medium-sized firms and almost 11 percent of large firms report that they have been spun-off from State-owned enterprises. This may have occurred as the State took steps to make existing State-owned enterprises more capable prior to privatization. It is difficult to predict how well these "spin-offs" will do over time. In many cases the existing State-owned enterprise was probably getting rid of less productive assets. In some other cases the managers of larger firms may have been involved in "cream skimming," separating out the most productive assets of the larger State-

[7] If State policies continue to favor privatized firms over new startups, small firms may not show the growth that one would expect.

owned enterprise and taking these assets into private ownership with the managers ending up as owners of these assets.

Smaller businesses are likely to be newer, started from private savings and organized *de novo.* While inexperience will hinder some firms, others will be stronger because of the owner's involvement in obtaining and organizing resources to meet market demands. Evidence from the Western economies confirms that smaller firms are a major source of job growth as they expand more rapidly than larger firms, and use fewer capital resources per worker. Given the evidence on unemployment and underemployment in the Ukraine, the State should be looking for ways to encourage and support the startup of smaller businesses.

E. OTHER DEMOGRAPHIC ISSUES

1. The Distribution of Businesses by Size and Industry

The survey focused several questions on the issue of the shape of Ukrainian industry. The best way to demonstrate the answers is through a table that shows the industrial distribution of business by size of business. This allows us to examine which industries are more heavily influenced by larger businesses and which have a stronger small or medium-sized business influence. This information about the size distribution of businesses by industry may help the government in shaping policy decisions about specific industries. Table 1-9 illustrates how businesses are distributed by size and industry.

Table 1-9: Percent of Firms By Industry and Employment Size Class

Principle Sphere of Activity for Your Business (Industry)	Employment Size Class			
	Small Zero to 50 Employees	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
Construction	9.7	22.5	11.1	12.6
Manufacturing, Mining	8.6	26.8	51.9	20.3
Agriculture and Forestry	5.5	4.0	4.0	4.9
Transportation and Communications	3.8	7.8	12.3	6.2
Wholesale or Retail Trade	39.1	12.2	6.7	27.5
Eating and Drinking Places	3.7	2.5	0.1	2.8
Domestic Services, Hotels, Recreation	10.5	8.2	6.2	9.2
Social and Cultural Services	5.5	5.3	1.1	4.7
Finance, Insurance, and Real Estate	1.7	1.6	2.1	1.7
Consulting Services	3.8	3.6	2.1	3.5
Other Business Services	2.1	0.7	---	1.4
Other	5.9	4.8	2.4	5.0
Count(Number of Businesses)	2,928,774	33,169	10,851	3,073,244

The last row of the table shows the number of businesses in the small, medium, and large-sized categories. The bulk of businesses are small, and in one sense smaller firms dominate most industries in terms of the number of businesses. Larger businesses are likely to be dominant in terms of employment in many industries. Smaller businesses are most likely to be found in the Wholesale and Retail Trade industry, while larger businesses are clearly dominant in the Manufacturing and Mining industries. Almost half of all businesses are found in either Manufacturing and Mining or in Wholesale and Retail Trade. The Construction industry has the third largest number of businesses, followed by Domestic Services, Hotels and Recreation an industry which combines services to buildings which house people, and services to people seeking short-term lodging and/or recreation of some sort. The Finance, Insurance, and Real Estate industry is dominated by larger businesses in terms of employment. There are very few businesses in this industry. Consulting Services and Other Business Services are both small industries in terms of the number of firms, but both of these are relatively new industries that have started to develop in response to the needs of both newly-organized and privatized firms. The Transportation industry remains dominated by large firms and State-owned firms may be important players in this industry.[8] The number of businesses in an industry can be calculated using the percentage entries in the industry rows, multiplied by the number of businesses found in the bottom row. Similar tables are being prepared for the five major regions of the Ukraine, and these tables will be distributed as an Appendix to this report.

2. The Distribution of Firms by Legal Form of Ownership

An earlier table illustrated the prior form of ownership for those firms that had been transformed from State ownership or from other private ownership. Only a portion of firms are covered by this table, however, since only 39.3 percent of businesses had a prior form of ownership. Table 1-10 shows the current legal form of ownership for businesses in all size classes.

[8] The United States for many years had a highly regulated transportation sector with trucking , busses, planes, and railroads all carefully regulated regarding entry into specific routes and markets. A wave of deregulation in the late 1970's and 1980's freed entry into these markets and the number of small and medium-sized businesses in transportation increased tremendously. Transportation prices fell dramatically as the industries reorganized through the creation of new businesses. Overall inventory management improved dramatically as transportation firms innovated new services such as "just-in-time delivery". Both the Federal and the state governments in the United States continued to strongly regulate the safety of transportation vehicles, but the transportation markets were able to reorganize to better meet market demands, independent of government-mandated and enforced monopolies on particular routes or markets. The Government of the Ukraine might look to the transportation industries as a major opportunity for increased privatization and increased deregulation of market activity.

Table 1-10: Percent of Firms Reporting Legal Form of Ownership, by Employment Size of Business

What is the Ownership Form of Your Enterprise?	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Private, Owned by Physical Persons	15.9	64.5	47.6	31.2	38.7	9.0	5.3	26.4
Individual Commercial Activity	80.9	0.8	----	0.1	17.9	----	----	10.9
Joint-Stock with 25%-50% held by the State	0.2	1.3	1.3	3.1	1.7	8.7	12.1	5.1
Joint-Stock with over 50% held by the State	----	0.8	1.1	2.7	1.4	4.4	10.8	3.7
Joint Stock with the Majority Held by Private or Juridical Persons	1.7	22.3	32.9	37.5	25.3	45.7	39.0	32.1
Joint Venture with the Majority Held by Private Persons	0.2	2.9	4.4	5.5	3.5	4.8	4.7	4.0
Joint Venture with the Majority Held By the State	----	0.5	----	0.4	0.2	0.2	0.2	
State-Owned	0.2	2.7	6.1	11.0	5.8	21.0	22.6	12.0
Collective	0.2	1.0	1.7	2.6	1.5	2.3	3.3	2.0
Public (Non-profit)	0.5	1.4	1.9	1.1	1.2	0.4	0.6	0.9
Other Types of Ownership (Cooperatives)	0.3	1.8	2.9	4.8	2.8	3.4	1.3	2.6
Number of Firms Reporting	591	623	523	974	2711	932	815	4458

This table demonstrates significant differences in the way small and large business are legally held. Smaller businesses are much more likely to held by physical persons. The category of Individual Commercial Activity also represents ownership by physical persons, but most of these businesses are unregistered.[9] Less than 30 percent of smaller businesses are held as joint-stock companies, with the percentage of joint-stock ownership increasing as business size increases. This is an expected result. Large businesses are much more likely to be held as joint stock companies as expected. The more interesting finding for larger businesses is that 22.6 percent of

[9] The registration and licensing of businesses will be discussed extensively in a following section of the report.

larger businesses are still owned by the government, and the government holds controlling or major interests in an additional 22.9 percent of large business. The government also continues to own or control through stock ownership a significant minority of medium-sized firms. Although a small number of businesses are still held in collective or cooperative modes, the Ukraine has moved towards legal forms of ownership which more closely mirror legal forms in Western and Third World countries. Joint ventures are still identified separately, although this may be an accounting convention useful for the State, which may play a minority role in many of these ventures, even if they are controlled primarily be stock ownership or private persons. Joint-stock ownership has become the most dominant form of legal organization of economic activity, even though many smaller businesses are held in other forms of ownership.

Figure 1-4: A Note on State Ownership

A Note on State Ownership

Many Western observers have advised the Government of the Ukraine, and the governments of Russia, the other NIS states, and the Eastern European countries to privatize state-owned enterprises. Some countries have done this more efficiently and effectively than others. The Government of the Ukraine, as shown in Table 10 still holds or controls a significant share of resources that could be privatized. Should the government be encouraged to privatize more completely? The answer from the standpoint of building a more productive, efficient and capable economy is probably yes, but the major policy issue is not whether privatization should be pushed to the bitter end. Rather, the major policy issue is whether the state-owned firms continue to operate in a monopolistic manner, with the state favoring its own businesses and restricting competition from private businesses. Experience in a number of Western countries with mixed economies (i.e., where the state owns some companies) indicates that government-owned businesses can compete effectively with private businesses, **if they are in open and competitive markets**. As long as there is freedom to enter or leave an industry, and as long as government policies do not favor the government-operated businesses, then competition will lead to productive outcomes. In the Ukraine, an outside observer would probably conclude that state-owned firms still retain a favored position in terms of access to market, access to resources, and access to government support. Evidence in support of this conclusion will be found throughout this report. Even though large state businesses are subject to the same tax rules as private businesses, and are inspected by the tax authorities as frequently, there is an open question as to what proportion of taxes due are paid by state-owned firms compared to private firms. There are also questions related to how state-owned firms are inspected by other state agencies, and how state-owned firms are provided capital through bank loans or through state subsidies. Uneven use or application of any of these may overwhelm the ability of non-state-owned firms to compete effectively. Favoritism in the letting of contracts may also bias outcomes against newer and smaller businesses. One defense against such favoritism is to focus private small business activity on markets that service private demand rather than government demand.

3. Are Ukrainian Businesses Closely Held?

One factor that is representative of small business ownership in most countries is that the number of owners of a small business is also small. It is impossible to tell how many owners are involved in joint-stock companies, but the survey did include a question on how many owners owned a given business. The results are shown in Table 1-11.

Table 1-11: Percent of Business Ownership by Number of Owners and Type of Business

Number of Owners	TYPE OF BUSINESS				
	All Business	**Privately Held**	**State-Owned***	**Women-Owned**	**Men-Owned**
One Person	25.2	31.2	0.3	43.1	29.1
2 or 3 People	14.8	17.9	0.4	13.2	19.4
4 or 5 People	4.7	5.7	0.3	5.3	6.0
More than 5 People	35.6	40.3	14.1	36.2	39.9
Other	19.6	4.8	84.9	2.3	5.6
Number of Businesses Responding	4222	3383	683	926	2183

* The respondents reporting a number of owners in the state category may include collectives, cooperatives, joint-stock companies where the state is a majority owner, and joint ventures where the state is the major partner

This table provides data from five different tabulations. The first three are simply defined and easily understood. The fourth column shows Women-owned or controlled businesses. The definition of ownership and control is that women hold at least 51 percent of total ownership. Men-owned businesses are a subset of privately held businesses, subtracting out women-owned businesses and joint-stock businesses where the gender of ownership cannot be determined. About 40 percent of all businesses are closely held by five or fewer owners. More than half of all privately held businesses are closely-held. These businesses would be expected to behave like smaller businesses in other economies, with ownership/management capable of making quick decisions since only a few people are involved. In 31.2 percent of private businesses there is only one owner, and decision making can be done very rapidly. One advantage of smaller businesses noted in the Western economics literature is that smaller businesses are more agile, more capable of switching direction quickly to reflect changes in market demands, and more flexible in many areas. This flexibility often gives the smaller business the ability to compete effectively against larger competitors that may have an advantage due to economies of scale, but are slow to change direction in the face of volatile demand. Larger businesses are strong competitors in markets where the demand is predictable and steady. Smaller businesses may do much better in markets where demand is unpredictable, or subject to sudden change in tastes or preferences. Smaller businesses may also operate more effectively in markets where the output is non-homogeneous and product design is varied to meet customer wants. Larger joint-stock firms can be and often are very tough competitors. But smaller businesses can find ways to compete in markets where flexibility allows for quick response. Many Ukrainian businesses are

closely held, by five or fewer owners, giving them a potential competitive edge in many of the more volatile markets.

4. Women-owned Businesses in the Ukraine

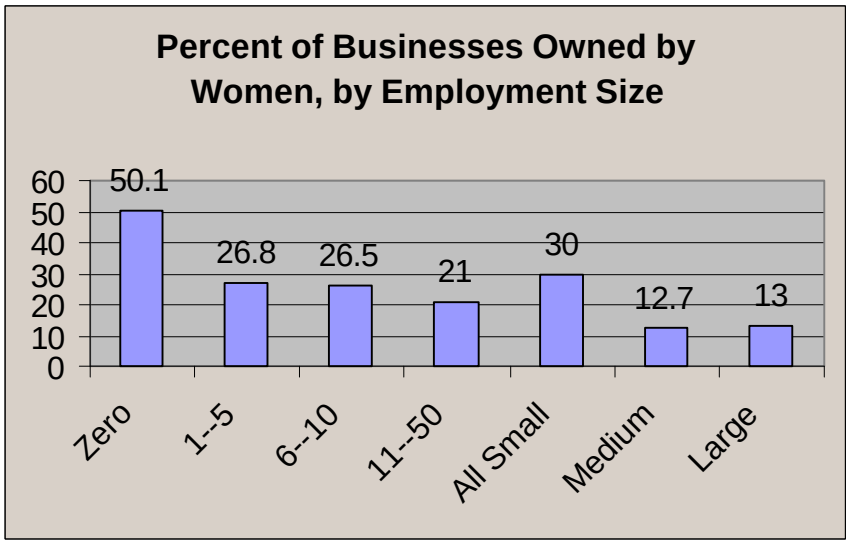
Survey respondents were asked to indicate when their business was 51 percent or more owned by women. The results were somewhat surprising as shown in Table 1-12.

Table 1-12: Percent of Businesses That Are Owned or Controlled by Women, by Size of Business

	Employment Size of Business							
Type of Business	**Small Zero to 50 Employees**					**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
Number of Employees	**Zero**	**1-5**	**6-10**	**11-50**	**All Small**			
Percent Owned or Controlled by Women	50.1	26.8	26.5	21.0	30.0	12.7	13.0	23.4

The results for the zero employee firms are not surprising. Many of the small vendors seen in street markets are women. That women also own a significant minority of smaller firms with employees is also not surprising. One strength of the Ukrainian economy is that women were active in the job markets, with many women occupying significant managerial positions in State-owned enterprises. The role of women as managers in State-owned Enterprises may explain the surprising numbers in Table 1-11, the relatively large proportion of medium and large businesses owned and controlled by women. In the West, ownership of larger firms by women, to the extent it can be measured is much lower than the 13 percent found in this survey. Women business owners are an important part of the business community at all levels of business size in the Ukraine. There has been an increasing amount of research in North America and in Europe about the differences in behavior between women business owners and men business owners. Such research would be most interesting in the Ukraine to determine if women business owners behave similarly to their Western counterparts. Women owner/managers appear to be better planners of business activity, are active in building links with other business owners, and are more devoted to handling the details which may make for competitive business performance. Women business owners also seem to compete very effectively in markets where preferences are shifting rapidly. The presence of a relatively large number of women-owned businesses in the Ukraine should contribute to the continued development and productivity of the small business sector.

Figure 1-5: Percent of Businesses Owned by Women, by Employment Size of Business



5. Informal (Unregistered) Business in the Ukraine

Many of the very small businesses identified in the survey were unregistered. Employment in these unregistered businesses amounted to 11.6 percent of total employment in those parts of the economy producing goods or services for sale in the market (See Table 1-1 above). Most of this employment is in the zero employee or 1-5 employee size classes. The very small businesses and the jobs they create represent a clear benefit to the State in the sense that the individual business owners are taking responsibility for their own welfare, and are acting in a productive manner. They are a clear detriment to the State in that they pay no taxes on their earnings nor do they contribute to the State Pension (Social Security) Funds or to the State Health Insurance Program. Avoidance of taxes breeds disrespect for government in general, so the State has a strong interest in making these smaller businesses pay their share of the tax burden. This strong interest must be balanced against some other benefits produced by these smaller businesses. One of the major, but unrecognized contributions of these businesses is that many of these very small business owners are learning skills that can help them expand into larger businesses over time. Very small businesses must be competitive to survive, since entry into these businesses is relatively easy. Owners must learn marketing quickly, and must learn to control costs if they are to survive. But these business owners are sometimes open to harassment by officials of state agencies.[10] Even if they are not harassed, *per se*, they may have to bear the costs of "informal" relationships with officials in agencies at all levels of government. They may also bear cost imposed by criminal elements that should be policed more effectively by the government.

[10] Although later in the report we will show that state agencies generally appear to be applying resources in a rational manner, and also appear to be reducing the burden they place on smaller businesses

Taxes, as we note below, may be the most important factor in holding back the development and growth of smaller businesses in the Ukraine. The jobs not created by smaller businesses that do not grow as the result of state-imposed costs, harm the economy and decrease the ability of the government to release unused or underproductive resources from State-owned enterprises.

II. EMPLOYMENT AND EMPLOYMENT CHANGE

A. THE DISTRIBUTION OF EMPLOYMENT BY SIZE AND INDUSTRY

In Section One the focus was primarily on the number of firms. In Section Two, the focus shifts more to the relationship between employees and businesses. Although several of the tables in section one dealt with this subject, the data presented here should extend the degree of knowledge about size, industry, and employment.

Table 2-1. Total Employment by Employment Size Class and Industry

Principal Sphere of Activity(Industry)	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Construction	233,326	27,123	77,358	485,561	823,418	99,041	928,037	2,651,496
Manufacturing and Mining	39,771	33,430	79,962	488,296	641,460	1,232,056	6,250,589	8,124,105
Agriculture and Forestry	331,429	24,790	19,488	81,086	456,793	181,368	227,220	865,381
Transportation and Communication	137,875	18,473	16,476	135,440	308,263	364,534	756,359	1,429,236
Wholesale and Retail Trade	1,246,174	236,201	312,987	910,295	2,705,657	437,035	320,396	3,463,088
Eating and Drinking Places	26,514	16,089	44,281	155,897	242,781	106,390	3,472	352,643
Domestic Services, Hotels, Recreation	220,0 69	43,278	100,717	394,438	758,501	321,759	555,567	1,635,827
Social and Cultural Services	151,132	11,799	52,461	226,760	442,151	183,179	112,426	737,757
Finance, Insurance and Real Estate	26,514	10,637	17,292	57,856	112,299	84,909	361,153	558,361
Consulting Services	37,120	27,710	41,519	103,325	209,673	137,200	88,710	435,584
Other Business Services	37,120	20,335	30,608	29,801	117,864	16,810	----	134,674
Other	167,040	33,937	60,254	143,125	404,356	195,989	232,038	862,383
Count (Number of Firms Projected by Size Category)	2,651,433	148,976	104,608	123,757	3,028,774	33,169	10,851	3,072,794
Total Employment	2,654,084	503,852	853,403	3,211,878	7,223,216	4,161,270	9,835,968	21,220,455

Several important points stand out in this Table. First, the Manufacturing and Mining sector is the major employer in the Ukraine. Within the sector, large businesses dominate employment. Second, the second largest industry, Retail and Wholesale Trade is totally dominated by small firms. Other industries appear to have employment more evenly distributed between small, medium, and large firms. The size distribution of employment can be seen more easily seen by

switching to a table where employment is distributed in percentage terms. Table 2.2 provides this information.

Table 2-2. Percent of Employment by Employment Size Class and Industry

Principal Sphere of Activity (Industry)	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Construction	233,326	27,123	77,358	485,561	823,418	99,041	928,037	2,651,496
Manufacturing and Mining	39,771	33,430	79,962	488,296	641,460	1,232,056	6,250,589	8,124,105
Agriculture and Forestry	331,429	24,790	19,488	81,086	456,793	181,368	227,220	865,381
Transportation and Communication	137,875	18,473	16,476	135,440	308,263	364,534	756,359	1,429,236
Wholesale and Retail Trade	1,246,174	236,201	312,987	910,295	2,705,657	437,035	320,396	3,463,088
Eating and Drinking Places	26,514	16,089	44,281	155,897	242,781	106,390	3,472	352,643
Domestic Services, Hotels, Recreation	220,0 69	43,278	100,717	394,438	758,501	321,759	555,567	1,635,827
Social and Cultural Services	151,132	11,799	52,461	226,760	442,151	183,179	112,426	737,757
Finance, Insurance and Real Estate	26,514	10,637	17,292	57,856	112,299	84,909	361,153	558,361
Consulting Services	37,120	27,710	41,519	103,325	209,673	137,200	88,710	435,584
Other Business Services	37,120	20,335	30,608	29,801	117,864	16,810	----	134,674
Other	167,040	33,937	60,254	143,125	404,356	195,989	232,038	862,383
Count (Number of Firms Projected by Size Category)	2,651,433	148,976	104,608	123,757	3,028,774	33,169	10,851	3,072,794
Total Employment	2,654,084	503,852	853,403	3,211,878	7,223,216	4,161,270	9,835,968	21,220,455

Large firms can now be seen to be the major employers in the Transportation and Communication industry, and in the Finance, Insurance and Real Estate industry. Smaller businesses standout as the major employer not only in Wholesale and Retail Trade, but also in Agriculture and Forestry, Eating and Drinking Places, Social and Cultural Services, and Other Business Services. Very small businesses, those with zero employees stand out as a percentage of Agriculture and Forestry and Wholesale and Retail Trade. Table 2-2 shows employment for all companies. One question of interest is the impact of state-owned businesses on the employment distribution. Table 2-3 shows how state employment is distributed.

Table 2-3. Employment in State-owned or State-Controlled Businesses, by Employment Size of Business

Principle Sphere of Activity(Industry)	EMPLOYMENT SIZE OF BUSINESS			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Construction	73,751	184,222	754,752	1,012,725
Mining and Manufacturing	63,859	190,926	2,789,084	3,043,869
Agriculture and Forestry	5,780	46,756	51,921	104,457
Transportation and Communication	28,620	65,417	363,488	457,525
Wholesale and Retail Trade	110,478	46,828	14,871	172,176
Eating and Drinking Places	36,467	36,008	4,261	76,735
Domestic Services, Hotels, Recreation	71,835	148,320	289,915	510,070
Social and Cultural Services	88,624	108,821	65,319	261,964
Finance, Insurance, and Real Estate	8,393	16,460	278,931	303,784
Consulting Services	30,412	79,535	67,489	177,435
Other Business Services	2,477	4,434	----	6,911
Other	32,747	79,001	161,154	272,902
Total	553,442	1,005,928	4,841,183	6,400,553

Some important information stands out immediately in this table. Total State employment in the industries producing goods and services for sale is sizeable, with more than 6,400,000 employees. Approximately half a million of these state employees are in small businesses, another million in medium-sized businesses, and almost 5,000,000 in large businesses. The Government of the Ukraine may have made some progress in privatization, but there is still a very sizeable portion of total industrial employment in the State sector. The total of 6,400,000 does not include the millions of State employees working in schools, hospitals, and other industries not producing a product or service for sale in a marketplace. To compare State employment with total employment, each cell of Table 2-4, shows State employment as a percent of total employment.

Table 2-4. State Employment as a Percent of Total Employment, by Employment Size of Business and by Industry

Employment Size of Business	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
Small Zero to 50 Employees	9.0	10.0	1.3	9.3	4.1	15.0	9.5	2.0	7.5	14.5	2.1	8.1	7.7
Medium 51 to 250 Employees	20.5	15.5	25.8	17.9	10.7	33.8	46.1	59.0	19.4	58.0	26.3	40.3	24.2
Large More than 250 Employees	81.3	44.6	22.9	48.1	4.6	----	52.2	58.1	77.2	76.0	----	69.5	49.2
Total Employment	38.2	37.5	12.1	32.0	5.0	21.8	31.2	35.5	54.4	40.7	5.1	31.6	30.2

Note: A dashed line means the number is zero or a number so small that projection error makes the number meaningless.

State employment is now seen as 30.2 percent of total employment. A scan of the first row of the Table says that State employment is no more than 15 percent of total employment in any industry. State employment is much more likely to be substantial in the medium-sized and large business categories, however. Large State-owned or controlled firms particularly dominate total employment in Construction, in Finance, Insurance and Real Estate, and in Consulting Services. Large State-owned firms are also significant factors in employment in the Manufacturing and Mining industry, in Transportation and Communications, in Domestic Services, Hotels and Recreation, and in Social and Cultural Services. The bottom row of the Table indicates that the State is the largest employer only in the Finance, Insurance and Real Estate industry. The State presence in the important goods-producing industries is very sizeable, however, and the State has a sizeable presence in the Transportation and Communication sector.

There is no simple way to evaluate whether a large State share of employment is a significant issue. For example, if much of the State presence in the Transportation and Communications industry is in State-owned railroads, this may be an efficient outcome. If the State is a major force in transportation of goods by trucks, however, it is much easier to ask why this industry has not been privatized. State employment in the Construction industry raises the same issues. If the large State-owned construction firms are building or maintaining large State infrastructure systems (roads and highways, housing construction), this might be considered an appropriate

State function. U. S. experience, however, suggests that housing construction might be better accomplished by private companies. The dominance of medium-sized housing construction firms in the United States is built upon the existence of highly-developed contracting mechanisms that makes it easier for smaller firms to work together to complete large projects. The Ukraine does not yet have the legal and cultural base to support such decentralized, yet effective housing construction techniques. From the data presented here it is difficult to make precise recommendations regarding privatization policy. Similar data, at a higher level of disaggregation (breaking major industry sectors into more detailed industries) would provide more insight into the privatization issue.

B. MEAN EMPLOYMENT BY SIZE AND INDUSTRY

Mean employment or average employment by employment size of business and type of business provides some additional insight into the relative differences in types of businesses. Table 2-5 provides this information for five types of businesses.

Table 2-5. Mean Employment by Size and Type of Business

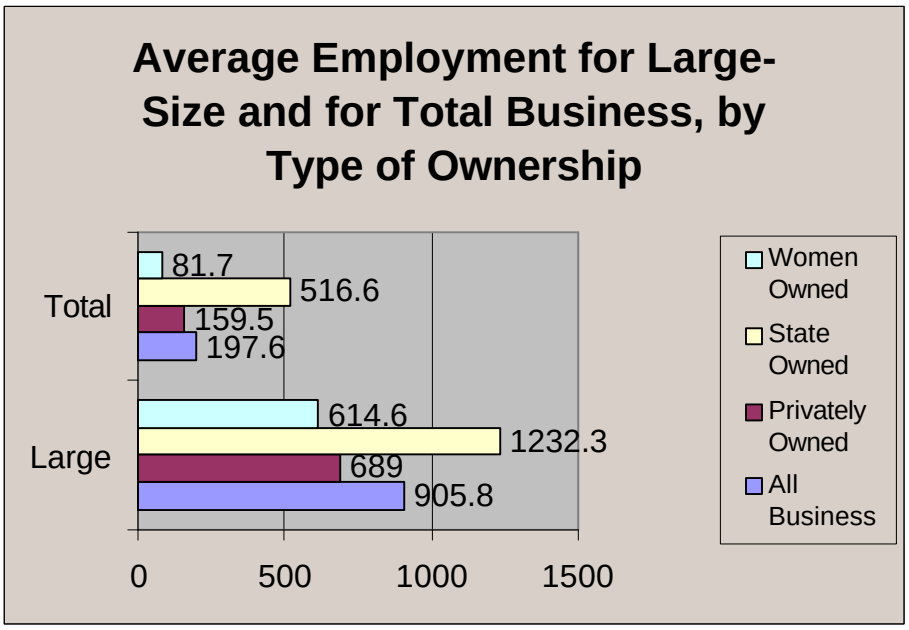
	EMPLOYMENT SIZE OF BUSINESS			
Type of Business	**Small* 1 to 50 Employees**	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
All Business	11.9	125	905.8	197.6
Privately-owned or Controlled	15.4	124.2	689	159.5
State-owned or Controlled	20.3	120.2	1232.3	516.6
Women-owned or Controlled	8.2	126.6	614.6	81.7
Men-owned or Controlled	12	128.1	766.5	150.7

*Note that the Small Business category begins with one employee in this table. By definition, zero employee businesses have no employees, and don't contribute to the calculation of average employment for businesses with employees.

The typical small firm in the Ukraine has 11.9 employees. Smaller businesses controlled by the State, in contrast have 20.3 employees, indicating that the average State-owned small business is more likely to be found in the 11-50 employee class. Women-owned businesses are clustered more heavily in the smaller sub-categories of small business, with a correspondingly lower average employment of 8.2 employees. Within a category such as small or medium, the average is constrained because there is both a minimum employment level and a maximum employment

level to define the category.[11] The most interesting size class, therefore is the large size class, since there is no defined upper boundary. Large State-owned enterprises average 1232 employees, for example, while large women-owned businesses average only 615 employees. The typical large business employs 906 employees. This number is higher than the average for all private businesses since the State still owns or controls a large proportion of large businesses.

Figure 2-1: Average Employment for Large-Size and for Total Business, by Type of Ownership



Because there is some variance between average employment levels, the average of all size classes within a business type may vary considerably. The average employment for the all business category for example is approximately 198 employees. The average for women-controlled businesses is only 81.7 employees. This is caused because more women-owned businesses are clustered in the small size category, and because the average large business owned by women is much smaller than the average large business in the all business category. Women-owned businesses are important for many reasons, but they do not contribute to total employment as significantly as other types of businesses. The average large State-owned business is much larger than the average large business for any other type of ownership,

[11]Evidence from many countries indicates that businesses are distributed within a category on a log-normal distribution. The mean employment in medium-sized category, for example, would be expected to be equal to the lower limit plus .30103 (the log of 2 to the base 10) times the distance between the lower and the upper boundary of the size class.. Given a lower limit of 51 and an upper limit of 250 we would expect to find the mean size of business at 51 plus 59.9 or 111 employees. All of the means for the medium-size category shown above are higher than this. This may be due to the fact that business owner/managers are counting both full-time and part-time employees, or it may be that medium-sized businesses are larger than expected in the Ukraine because so many of the businesses were privatized from State-owned businesses that were over-staffed relative to privately-owned businesses. The bias seems roughly consistent across all types of businesses.

reflecting the fact that State-owned enterprises are clustered in industries that require large size in order to achieve economies of scale (the ability to produce at levels of output which minimize cost per unit of output), and also reflecting the fact that many State-owned businesses still have excess labor to shed, as State-owned enterprises attempt to become more efficient.[12]

C. PART-TIME EMPLOYMENT

How many employees are employed part-time by size class of business. How many part-time employees does the typical firm use, and what share is that of total employment. The distribution of part-time labor by size class is shown in Table 2-6.

Table 2-6. Mean and Share (Percent) of Part-time Employment By Size of Business and Type of Business

	EMPLOYMENT SIZE OF BUSINESS			
Type of Business	**Small[13] One to 50 Employees**	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
All Business	1.88 22.5%	21.2 16.6%	140.5 17.1%	31.6 20.3%
Privately-owned or Controlled	1.7 23.2%	23.7 17.7%	142.8 18.7%	26.8 21.5%
State-owned or Controlled	3.1 15.9%	16.1 14.4%	137.8 13.8%	58.4 14.6%
Women-owned or Controlled	1.6 29.8%	26.6 19.8%	188.4 21.3%	24.1 27.7%
Men-owned or Controlled	1.7 19.8%	22.7 16.9%	143.9 19.2%	28.1 19.1%

The use of part-time workers is not consistent across type of business. Women-owned businesses are significantly more likely to use part-time workers and State-owned businesses are considerably less likely to use part-time workers.. These results are particularly noticeable in the small size class for women-owned firms, and in the medium and large size classes for State-owned firms. Smaller firms are most likely to use part-timers. Roughly one worker in five is employed on a part-time basis. There is no international norm to compare the Ukraine to. The average part-time share of 20.3 percent for all businesses is similar to the number for the United States, but may differ from the level found in other countries. What is of interest is the extent to which workers favor part-time work. Given the number of employees on unpaid annual leave,

[12] State-owned enterprises may appear very large because employees on extended unpaid leave are still carried on the books of the company, even though there is little chance that these individuals will ever be called back to active work.

[13] Note that zero employee firms are not included in the small size class in Table 2-6.

and the number of workers unemployed,[14] it is likely that there is an excess demand for full-time work. Many workers may be satisfied, therefore, with part-time work.

The proportion of part time employees may differ by type of business. Another variable of interest is the hours worked by the typical part-time worker. Table 2-7 describes average part-time and full-time hours worked for the different types of businesses.

Table 2-7. Part-time and Full-time Hours per week by Size of Firm and by Type of Business

Type of Business	EMPLOYMENT SIZE OF BUSINESS			
	Small One to 50 Employees	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
All Business	PT 21.1 FT 41.9	24.2 40.1	24.9 39.8	22.7 41.1
Privately-owned or Controlled	20.9 42.2	24.0 40.2	25.0 39.9	22.3 41.4
State-owned or Controlled	24.1 40.9	24.6 39.9	24.8 39.6	24.5 40.1
Women-owned or Controlled	19.6 42.1	24.3 40.7	25.2 40.0	21.1 41.7
Men-owned or Controlled	21.2 42.1	23.5 40.1	24.9 39.9	22.5 41.3

Each cell in Table 2-7 provides information on full-time and part-time hours worked. The top number in each cell shows reported part-time hours worked per week. The lower number in each cell shows the same information for full-time workers. The data are remarkably consistent across both size classes and type of business. Small businesses report longer hours for full time workers, while larger businesses appear to meet the state mandate that the average workweek not exceed forty hours. Large businesses, which reported that they used fewer part-time workers, make up for this by working their part-time workers for longer hours (three days per week on average). State-owned businesses of all sizes also appear to provide more hours of work for part-time employees. Small women-owned firms provided the fewest hours per week for part-time workers.

[14]As part of the survey, 4000 household interviews were held and a total of 9792 individuals were identified age 15 and over. Of these, 5320 were not economically active, and 19.4 percent of this group described themselves as unemployed.. These numbers generate an unemployment level of 10.5 percent. This number is reasonably close to the 8.6 percent unemployment rate measured for March 1999 by Financial Markets International as part of the USAID Labor Market Monitoring Project.

1. Women in the Workforce

Women-business owners might be expected to hire a larger proportion of women workers—and they do. Small businesses owned by women hire more than four women for every man hired. Medium and large-sized women owned businesses show similar, but slightly less intense biases averaging three women employees for every male employee. Table 2-8 provides full details about women employees by size and type of business.

Table 2-8. Share (Percent) of Women Employed by Size and Type of Business

Type of Business	EMPLOYMENT SIZE OF BUSINESS			
	Small Zero to 50 Employees	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
All Business	50.2	45.7	46.4	48.6
Privately-owned or Controlled	49.1	43.1	46.9	47.7
State-owned or Controlled	62.6	51.7	44.8	52.2
Women-owned or Controlled	84.0	74.2	74.8	82.1
Men-owned or Controlled	31.2	34.6	39.0	33.0

State-owned businesses use a workforce dominated by women, with more than 50 percent of workers being women. Male-owned businesses, defined as private, non-women, non-State, non-large joint-stock companies appear to have a bias similar to that of women. On average, businesses controlled by five or fewer men hire two men for every women employee. Small men-owned businesses hire the smallest number of women as a proportion of their workforce.

For all businesses, women make up just under half the workforce. For smaller businesses women are just over half the workforce (50.2 percent). Compared to most Western countries, Ukrainian women make up a larger portion of the total workforce, and there appear to be few biases against the hiring of women as workers.[15]

2. Family Workers in the Workforce

Family members are hired by all sizes and types of businesses, as shown in Table 2-9.

[15] This is not to say that women workers are found equally in senior positions in many companies. While women may be accepted as lower-level workers, their promotion possibilities may be more limited than the possibilities for their male co-workers. The survey did not contain sufficient questions to provide insight on this issue.

Table 2-9. Percent of Firms Employing Family Members by Type of Firm

Type of Business	EMPLOYMENT SIZE OF BUSINESS			
	Small Zero to 50 Employees	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
All Business	26.5	23.7	28.0	26.2
Privately-owned or Controlled	28.9	27.5	31.2	29.0
State-owned or Controlled	7.8	14.4	22.4	15.6
Women-owned or Controlled	28.5	23.1	31.8	28.2
Men-owned or Controlled	28.0	27.8	30.8	28.3

Businesses of all types and sizes report hiring of family members. Small and medium-sized State-owned businesses have the lowest rate of hiring, but large State-owned firms are more likely to behave like private businesses. Almost all family members (more than 90 percent) are compensated for their work, even in the smaller businesses. This compares favorably to the Asian countries where many family workers are unpaid. In the West, most family workers are paid, but the proportion of family workers is probably lower than in the Ukraine. As shown below, not all Ukrainian workers are paid in the same manner as in the West.

3. Size of Firm and the Probability of Payroll in Arrears

In the Western countries and in the developed countries of Asia, payment of wages is considered an over-riding obligation. In the United States, firms that are as little as two weeks behind in paying workers are often forced into bankruptcy. The bankruptcy rules generally give workers first call on any funds raised through liquidation of business assets. Occasionally, workers will agree to give management permission to hold back wages for a short time, if the payroll cash is needed to pay for materials that are necessary to keep the business running. Such occurrences are very rare.

In the Ukraine the situation is very different. Many businesses, including many State-owned enterprises are very delinquent in the payment of wages. Table 2-10 provides the details.

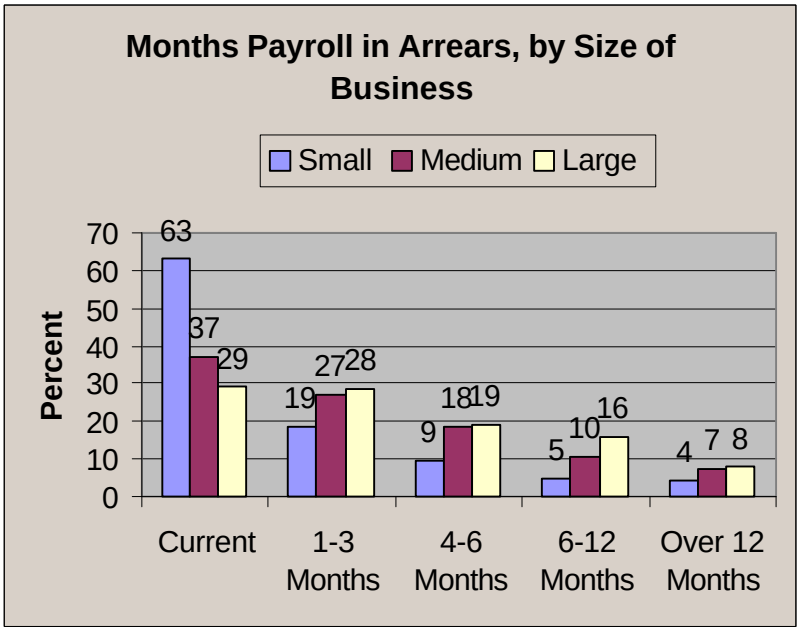
Table 2-10. Percent of Firms Reporting Number of Months Payroll is in Arrears, By Size of Business

Number of Months Payroll is in Arrears	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Current	100	69.8	66.7	57.3	63.1	37.0	29.2	49.4
1-3 Months	---	14.9	18.3	20.7	18.5	26.9	28.4	22.7
4-6 Months	---	8.1	8.9	10.5	9.4	18.4	19.0	13.7
6-12 Months	---	2.5	3.4	6.6	4.7	10.4	15.7	8.4
Over 12 Months	---	4.7	2.8	4.9	4.3	7.3	7.7	5.8

The good news is that 49.4 percent of firms indicate that they are current in their payments to workers. Small businesses do even better, with 63.1 percent of small businesses paying workers on a current basis. Medium and large businesses are not doing as well, however, with approximately one/third of businesses paying workers on a current basis. The fact that the biggest proportion of delinquencies is in the medium and large-sized businesses indicates that more than half the workers in the goods and services producing industries are probably behind in their pay. About a quarter of the firms in arrears (22.7 percent) report that they are less than four months delinquent. But almost 30 percent of businesses are four months or more in arrears. Despite the lack of payment, many workers still appear to be reporting for work.[16] The situation is very bad in the larger businesses, where more than 42 percent of businesses report that workers have not been paid for four months or longer. Approximately 36 percent of medium-sized firms say they are in the same situation.

[16] Many businesses appear to be placing numerous workers on extended unpaid leave. This stops these businesses from accruing more debt to their workers, but it appears to be tantamount to firing the worker, since there appears little chance that the worker will ever be called back to work.

Figure 2-2: Months Payroll in Arrears, by Size of Business



There is an old Soviet joke about this kind of treatment of workers. A worker who had not been paid in some time was asked how he dealt with this situation. He responded that the State enterprise pretends to pay him, and he pretends to work. While humor sometimes helps people cope with difficult situations, the extent of delinquent payments in the Ukraine is a serious problem. While it is a truism that large enterprises can sometimes adjust wage payments in favor of the firm, it is equally true that the worker can adjust his productivity in return. The lack of wages is a disincentive to workers that almost certainly lowers average productivity. Unmotivated workers not only produce less, but they also lose much of their motivation to maintain company assets.[17] This causes firms to lose assets over time, with obvious negative affects on the capability of the company to maintain output (and employment) over time.

The most positive thing that can be said about this situation is that smaller businesses appear to be doing a much better job of maintaining current payments to workers. When smaller firms are in arrears, it is usually for a shorter time period when compared to the length of the delinquency in medium or large firms. Smaller business workers, since they are paid more effectively, are likely to be motivated to produce at a higher rate than workers in larger businesses.

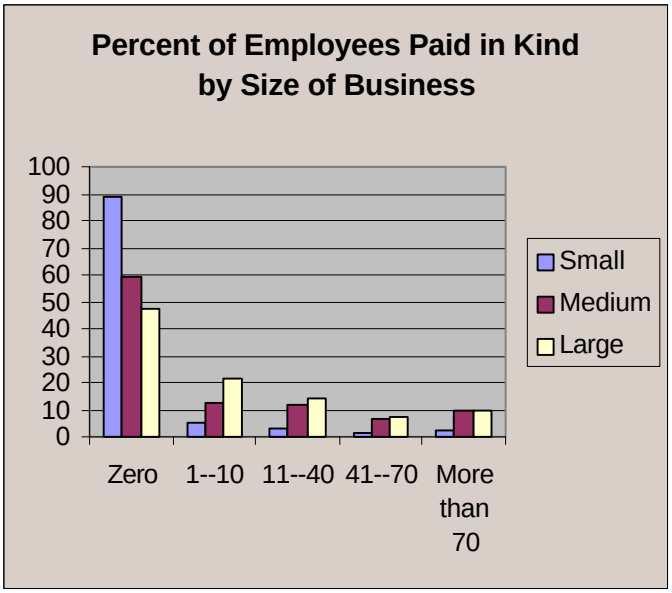
4. A Related Problem: Paying Workers in Kind

Some workers in many countries have found themselves paid in kind, i.e., paid by receiving items produced by the company in lieu of wages. Unless the product is of immediate use to the

[17] Warsaw, for example, has a large outdoor market called the Soviet Market where steady supplies of tools, equipment, military items, etc., are for sale. Some workers appear to be offsetting the lack of wages by systematically stealing equipment from their place of work.

worker, the worker must accept the responsibility for marketing the goods and finding someone who will pay a reasonable price for the product, or agree to barter for the product. To the extent that the worker is unable to make an exchange for the product at a "reasonable" price, the worker loses a portion of his wages and his purchasing power.

Figure 2-3: Percent of Employees Paid in Kind by Size of Business



Workers sometimes prefer payment in kind in times of hyperinflation. In the German hyperinflation following World War I (Sometimes referred to as the Great War), when inflation increased to a rate of 7000 percent per day, workers who had been paid monthly, first asked for biweekly wage payments and then for weekly payments and then for daily payments. Anyone holding money for more than a few hours saw the purchasing power of the money decline to almost nothing. In these circumstances workers finally demanded that they be paid in kind. By the end of the hyperinflationary period, workers were paid several times daily in units of the firm's products, and the workers marketed these products immediately and spent the proceeds as quickly as possible. No one can call this a desirable situation. Yet, fully one-quarter of firms in the Ukraine report that they are paying workers in kind. The details are shown in Table 2-11.

Table 2-11. Percent of Firms Reporting Percentage of Payroll Paid in Kind, by Size of Business

Percent of Payroll Paid In Kind	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Zero Percent	100.	88.5	89.9	80.8	88.6	59.2	47.4	74.9
1-10 Percent	---	4.8	5.4	8.7	5.3	12.9	21.3	9.8
11-40 Percent	---	2.9	2.1	4.2	2.6	11.5	14.1	6.5
41-70 Percent	---	0.8	0.6	2.5	1.2	6.5	7.5	3.5
More Than 70%	---	2.7	2.1	3.7	2.4	10.0	9.7	5.3

The good news here is that 75 percent of all businesses responding to the interviewer are not making payments in kind. For smaller businesses the record is even better, with 88.6 percent not using payment in kind to meet their payrolls. The unwelcome news is that approximately one-sixth of medium and large businesses report paying more than 40 percent of their workers in kind. As in many other areas, many smaller businesses are doing a more capable job than some medium and large businesses.

5. Employment Changes in Businesses During the Six Months Prior to the Survey

Businesses responding to the survey interview were asked to answer three questions related to the employment level within their business. First they were asked if employment had increased, decreased or stayed the same during the last six months. If the response was that employment had decreased, the firm was then asked to indicate whether they had put anyone on extended unpaid leave or whether they had fired some workers. Respondents were also asked to provide information on how much employment had declined and how many workers had been put on leave or fired. The results of these questions are shown in Table 2-12.

Table 2-12. Percent of Firms Reporting Employment Change in the Past Six Months, by Size of Business

In the Past Six Months, Has the Number of Workers	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Decreased	2.6	17.1	19.5	30.3	19.3	44.8	52.6	30.7
Increased	0.3	5.7	10.6	13.3	8.3	12.3	11.5	9.7
Stayed the Same	96.9	77.2	69.9	56.4	72.5	42.8	35.9	59.6
Number of Firms Reporting	579	631	528	985	2723	941	814	4478
Did You Put Any Employees on Unpaid Leave?	NA	NA	23.1	34.2	24.9	50.7	56.2	39.1
Number of Firms Reporting	NA	NA	523	979	1502	933	809	3244
Did You Fire Some Employees?	NA	NA	34.3	26.7	28.6	48.0	51.8	46.9
Number of Firms Reporting	NA	NA	99	292	391	417	423	1131

Note: A zero employee firm may have employees on a part-time or part-year basis, but report no employment at the date of the interview. Note also that the responses for zero employee firms is absent from the bottom four rows of the table, since, by definition a zero employee firm has no employees to lose. In the present case the responses for the firms with 1-5 employees were also taken from the table because of errors in some responses. NA means not available.

As with many of the issues relating businesses to employment, the responses to the questions behind this Table did not provide much encouragement to the Ukrainian economy. Approximately 60 percent of firms reported that employment remained stable, but more than 30 percent said employment had declined, while fewer than 10 percent of reporting firms said that employment in their firms had increased. In a stable or growing economy the number of firms reporting employment growth would be equal to or greater than the number of firms reporting employment losses. The difference between the percent of firms reporting employment expansion and the percent reporting employment losses is often called an Index of Employment Growth.. At a level of minus 21 now (30.7 minus 9.7) the index is extremely negative and implies that the employment level in the economy is declining.

Smaller businesses again report better results than larger businesses, with a small business employment index of minus 11. This still implies that employment in this size class is probably declining but not as much as it is declining in large businesses. Medium-sized businesses with

an employment index of minus 32.5 appear to have had the worst employment situation during the past six months.

The relatively poor performance of medium and larger businesses is reinforced in the last four rows of the Table where firm responses on extended unpaid leave and employee firing are recorded. In each case, the number of firms answering yes to these questions is reported. Both medium and larger businesses more frequently responded yes to these questions. All firms were also asked to provide numbers for the decline in employment, the number put on extended unpaid leave, and the number of employees fired. Unfortunately, enough firms answered these questions in an inconsistent manner that it is impossible to tabulate meaningful totals and averages for these items. Respondents may have guessed at some of the numbers, or they may deliberately falsified the response. Many firms appear to be "hiding" employment from the State tax authorities in order to minimize the amount of taxes paid. This would be consistent with their providing inconsistent or incorrect answers to these questions. The numbers at the top of the table seem more reliable, however, and certainly appear sufficient to identify the poor employment situation during the last six months.

III. RELATIONSHIPS WITH STATE AUTHORITIES

1. Registration

The typical Ukrainian business is never far from the presence of government officials representing a myriad of government bureaus and agencies. Agency officials may visit businesses on a random schedule, and require full cooperation and support for any visit. Businesses must register with the state, and inform the state of the number of employees. These are not unwarranted requests on the part of the State, but they lead to potential problems and costs associated with a crushing tax burden, "informal requests" from government officials, inspections, fines, and other problems. This section deals only with registration, licensing, inspections and fines. Taxes will be dealt with extensively in another section. In this section the first issue deals with registration of a business with the local authorities and the tax authorities. In the survey each firm was asked if they were registered. The results are shown in Table 3-1

Table 3-1. Percent of Businesses Reporting That They Are Registered With the State Tax Authorities

	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
Number of Employees	**Zero**	**1-5**	**6-10**	**11-50**	**All Small**			
Percent of Businesses Registered	37.9	89.0	99.4	99.6	84.3	99.6	99.4	90.3

Almost all firms, other than the zero employee firms, are registered with the government. This is not surprising, since the sample used to identify firms with employees was taken from a data base maintained by the State Committee on Statistics, based on data provided by the State Tax Authorities. Most zero employee businesses were not registered, however, and some of the businesses with 1-5 employees were also not registered. It was assumed that most unregistered businesses would be unwilling to admit to their unregistered status, but the data indicate that the majority of unregistered businesses identified their registration status honestly. It is likely, however, that some of the zero employee businesses that indicated they were registered are in reality not registered. It was hoped that a check could be made against State Tax Authority databases to test whether zero-employee businesses that claimed they were registered really were. The respondents to this survey had been promised anonymity, however, and it was not possible to work out a method for conducting the test that would maintain this anonymous status.

Registration makes a business legal, but it also brings the business to the attention of the State Tax Authorities. This would be reasonable if the tax regime was reasonable in terms of tax rates, tax administration, and the honesty and reasonableness of the officials. Many businesses feel so

burdened by these elements that they will go to great lengths to misinform State tax officials. The first step in this process if you are a very small business is to not register your business. This may help in avoiding taxes, but it does not prevent incursions by other State officials, including local authorities, police and fire officials, environmental officials, and a host of representatives from other agencies.

2. Licensing of Businesses

Most businesses that are registered must also be licensed by one or more State agencies. Table 3-2 shows the number of businesses, by size, that require at least one license.

Table 3-2. Percent of Businesses Reporting That it is Necessary to Obtain at Least One Business License

Type of Business	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or more Employees	Total
Number of Employees	Zero	1-5	6-10	11-50	All Small			
All Business	32.7	57.8	67.7	72.8	60.6	68.4	59.8	62.1

Slightly over 60 percent of all businesses need at least one license in order to go about their business. Larger small businesses (with 11-50) and medium sized businesses are most likely to require at least one license. Zero employee businesses are least likely to have a license of any kind. The licensing system does not appear to be biased by size. Most businesses will need to obtain a license. Many businesses will need to obtain more than one license, however as shown in Table 3-3.

Table 3-3. Percent of Firms Reporting Number of Licenses Required, by Industry*

(Principle Sphere of Activity for your Business)	Number of Licenses						
	One	Two	Three	Four	Five	6-15	Number of Firms Reporting
Construction	64.5	13.8	7.3	5.5	2.1	5.2	383
Manufacturing, Mining	48.4	18.2	10.7	3.9	6.1	9.2	413
Agriculture and Forestry	51.0	9.8	7.8	9.8	2.0	15.7	51
Transportation and Communications	57.5	17.3	11.0	1.6	2.4	7.9	127
Wholesale or Retail Trade	41.8	22.2	12.6	6.5	3.7	9.7	834
Eating and Drinking Places	18.2	26.3	23.2	14.1	5.1	11.1	99

Domestic Services, Hotels, Recreation	58.9	17.2	6.8	5.2	2.6	7.8	192
Social and Cultural Services	51.0	21.2	7.7	2.9	3.8	11.5	104
Finance, Insurance, and Real Estate	50.9	16.4	5.5	3.6	1.8	9.1	55
Consulting Services	58.5	20.0	15.4	1.5	1.5	3.1	65
Other Business Services	63.6	15.2	12.1	---	3.0	6.1	33
Other	55.3	20.2	7.4	4.3	4.3	6.4	94

*71 firms reported that they needed more than 15 licenses. Of these firms, 15 were in Manufacturing and Mining, and 29 were in Wholesale and Retail trade. These numbers represent 3.6 percent of the firms in Manufacturing and Mining, and 3.5 percent of the firms in Wholesale and Retail trade. To determine the number of firms reporting in any category, multiply the percent reported by the number of firms reporting. For example, to determine the number of Eating and Drinking Places reporting four licenses, multiply 14.1 percent by 99 and round to the nearest whole number to obtain 14 firms. In general, if the number of firms reporting in a given cell is less than 30, the percent reported should be treated with some caution. The number of firms in adjacent cells can be added to produce a new category. For example, the number of Eating and Drinking Places reporting three or four licenses is equal to 23 + 14 or 37. This number is greater than 30 and can be considered as a more representative number.

The probability of needing one, two, three, four, five, or more licenses is shown in each row for 12 industry groups. It is difficult to discern any pattern of bias by industry from the numbers shown here. Eating and Drinking Places are more likely to need multiple licenses, but 18.2 percent of the firms in this industry reported that they needed only one license. Domestic Services firms and Wholesale and Retail firms also seem to need multiple licenses. The goods producing firms might be expected to require more licensing because of the complexity of their operations and the possible negative influence they might have on environmental conditions or on the health and safety of their employees. The Construction industry seems to need fewer licenses than most other industries, however, while Agriculture and Forestry[18] and Manufacturing and Mining are more heavily licensed. Most of the service industries are relatively lightly licensed, with the exception of Consulting Services, where a relatively large number of businesses need three licenses.

3. Inspection of Businesses

Licenses, in and of themselves, do not seem to impose a heavy burden on businesses, although Ukrainian business owners, like business owners in many other countries, would prefer less government activity and less licensing. What really takes the time of a Ukrainian business is the inspections by the many state agencies that feel they have to inspect the premises and activities of every business. Bureaucrats tend to justify their work by claiming that it protects the interests

[18] Agriculture and forestry here represent processing industries that produce and distribute products made from agricultural crops or wood. The actual growing of food is in the farm sector, which is not considered part of the business sector. A large farm might process and sell some products based on items grown on the farm. This farm would be counted as both a farm and part of the agriculture sector, and a processing or sales business that is part of the business sector.

of the people—and at one time this may have been true. Many of the bureaus currently inspecting businesses originated in an earlier time and under a different economic regime that might have required extensive policing of State-owned businesses. In a capitalist system, however, the discipline of the market can replace some of this policing. Many State regulatory authorities have not taken notice of the change in the nature of the market structure and continue to carry out their duties as if they were in a Socialist State. This may be fully justified in situations where the State is still the owner and operator of the business, but even there the State-owned enterprise often must meet the test of the marketplace. Table 3-4 shows the number of inspections by State agencies over the six-month period prior to the survey. The table is organized by size of business, so that we can isolate trends and issues that might be related to differences in size or to some bias against businesses in a particular employment size range.

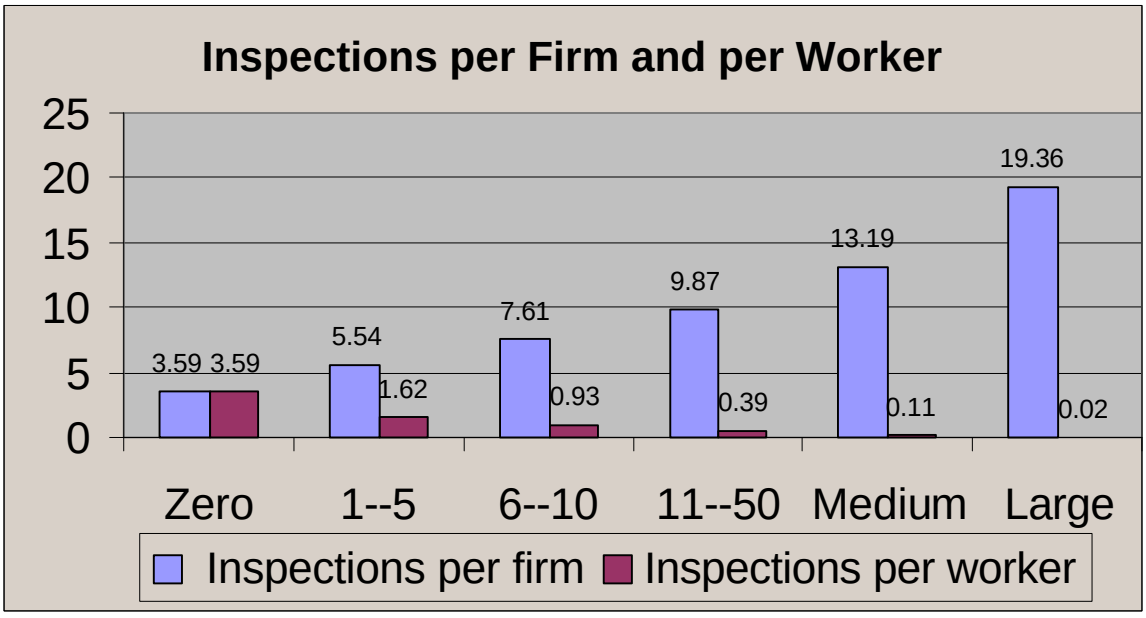
Table 3-4. Average number of Inspections by State Agencies for the Six Months Prior to the Survey, By Employment Size of Business*

Inspecting Agency	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251+ Employees	Total
Number of Employees	Zero	1-5	6-10	11-50	All Small			
Tax Agency	1.86	1.72	2.22	3.34	2.43	3.81	7.30	3.61
Fire Department	0.23	0.86	1.21	1.78	1.12	2.65	2.94	1.77
Police Department	0.65	0.94	0.71	0.81	0.78	1.40	1.53	1.05
Sanitary/Epidemic Station	0.36	0.78	1.46	1.75	1.17	2.52	3.01	1.79
Ministry of Environment	0.03	0.19	0.13	0.28	0.18	0.47	0.84	0.36
Committee on Standardization	0.04	0.21	0.24	0.35	0.23	0.58	1.04	0.45
Consumer Protection Committee	0.34	0.33	0.61	0.69	0.52	0.55	1.07	0.62
Anti-Monopoly Committee	---	0.11	0.06	0.09	0.07	0.16	0.26	0.13
Department of Architecture	0.02	0.18	0.40	0.25	0.21	0.20	0.24	0.21
Other Agency	0.06	0.20	0.59	0.53	0.37	0.84	1.13	0.61
Total	3.59	5.54	7.61	9.87	7.08	13.19	19.36	10.60

*If the six-month rate were maintained for 12 months, this would imply an average of 21.2 inspections per year per business. This number compares favorably with earlier reports, which placed the annual number of inspections at 70 or more. The numbers reported here are similar to the May, 1999 report of the International Finance Corporation (IFC), although not strictly comparable, since the months covered by the current survey (October 1998 through March 1999) do not completely overlap with the months covered by the IFC report. Both reports confirm a marked reduction in the number of inspections by State Agencies.

The most important news in this table is that the average number of inspections is down considerably from the numbers reported in other studies. The 1997 report on the State of Small Business in the Ukraine, published by the International Finance Corporation (IFC) cited an average of 78 inspections per year for the typical small business in the industries they examined. The 1998 report from the IFC cites a dramatic improvement, with a decline in the average number of inspections to 13 inspections. Part of this decline may be attributed to the Presidential Decree, which went into effect in September 1998. The numbers in this report generally support the findings of the IFC report. Data collection for this survey occurred primarily in April and May, and the six month period that owner/managers were asked to use as a reference period began after the Presidential Decree went into effect. The numbers reported in Table 3-4 appear slightly higher than the 1998 IFC report, but significantly lower than the IFC report for 1997. The sample for this report was both broader and larger than the sample for the IFC report.

Figure 3-1: Inspections per Firm and per Worker



The bottom row of the Table shows the total number of inspections received by businesses of different size over a six-month period. Presumably the annual number of inspections would be double the six-month rate. A rational bureaucrat might be expected to spend more time inspecting larger businesses than smaller businesses. Larger businesses are more complex and more likely to have a major impact if they do not comply with a given regulation. In organizing the data by size, therefore, we might anticipate that the number of inspections will increase as the size and complexity of the firm increases. The Total row of the Table confirms this expectation. The larger the business, the greater the number of inspections. In one sense at least, government inspectors appear to be acting rationally. Examining the other rows of the Table reinforces this conclusion. Each agency, including the State Tax Agency appears to follow the same pattern. The only exception appears to be the Department of Architecture, which inspects at more or less the same rate independent of the size of the firm being inspected.

Several other conclusions stand out. Very small firms with five or fewer employees receive fewer visits from agency inspectors, but relative to other, larger businesses they are more heavily burdened. The burden is particularly true for the owner/manager of these small businesses since this person must deal with all of the inspectors. In larger businesses certain employees may be delegated to meet with some inspectors, because the employee's duties require the skills and knowledge needed to deal most effectively with a particular agency. One way to illustrate the burden more clearly is to calculate the number of inspection per employee. This is done in Table 3-5.

Table 3-5. Number of Inspections per Employee, by Employee Size of Business

	Employment Size of Business							
	Small Zero to 50 Employees					**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
	Zero	**1-5**	**6-10**	**11-50**	**All Small**			
A. Total Number of Inspections by State Agencies in Prior Six Months	3.59	5.54	7.61	9.87	7.08	13.19	19.36	10.60
B. Average Employment by Size Class	1.0	3.4	8.1	25.6	11.9	125.1	905.9	197.6
C. = A/B = Number of Inspection per Worker	3.59	1.62	0.93	0.39	0.28	0.11	0.02	0.05

In smaller firms the burden per worker because of visits by inspectors is clearly much greater in the smaller firms. The single worker bears roughly 700 times the load of the worker in a large plant. But it may be argued that the inspection in a small firm takes less time than the inspection in the large firm. True, but the inspection in the large firm probably doesn't take 700 times as long, or even 325 times as long. It is true in every country that regulates businesses that the cost of dealing with the regulation (and related inspections) is much greater for the smaller firm than for the larger firm. This is true because the smaller firm, by definition does not have the number of workers needed to spread the burden of a given inspection. Because the typical worker in a very small business must spend more time on average in dealing with State inspectors, the typical worker has less time to spend on other, perhaps more productive activities. The State, in carrying out its typical pattern of inspections, has given larger businesses a relative advantage and smaller businesses a relative disadvantage. In competitive situations the smaller business will grow more slowly.

Larger firms compete against smaller firms usually by exploiting economies of scale. That is, the larger firm can operate at the optimum scale of output, and can produce a given product at a lower cost than a smaller competitor not operating at an optimal scale. This is a legitimate

advantage for the larger firm, and should be exploited by the larger firm, which can charge a lower price, still make a profit, and take market share from the smaller competitors. Smaller businesses in order to compete must find a way other than price competition, if they are to survive against the larger competitor. Smaller firms do this in many ways. Many smaller firms stress quality and service. They may bundle services with the product being sold, for example, so that a customer knows that a deficiency in the product will be corrected by the local small firm. Many small firms differentiate their product. If the larger firm makes only a heavy product, a small firm will produce a lighter version. If the large business product comes only in the color white, the smaller firm will offer a similar product in a variety of colors. If the larger business product needs servicing, it is often the smaller business that offers the service. Small businesses can and do find effective ways to compete, even against a larger competitor with an absolute price advantage.

What the smaller business cannot do, however, is offset the disadvantage imposed by the excessive burden of dealing with State inspections. State agencies can help to solve the problem and help make the smaller business sector more productive. Suggestions to help accomplish this goal include:

- One possibility is for an agency and its bureaucrats to carefully review the rules and regulations that they are inforcing, to see if some rules can be eliminated or simplified.

- Another technique is to carefully review the inspection process to see if some inspection visits can be eliminated completely, or if inspection visits can be scheduled at a less frequent pace (Once every two years for example rather than once every six months).

- Another possibility is to introduce the concept of tiered regulations. Such regulations exempt or set more flexible compliance standards for very small firms below some threshold employment size. Many government regulations in the United States are now "tiered" regulations that do not apply to businesses with 10 or fewer employees or 25 or fewer employees. Regulatory bureaus and agencies can introduce all of these techniques to minimize their interference with businesses, without losing their ability to protect the interests of the people.

The assumption throughout this discussion is that the inspector for any given agency is honest, capable, and willing to work with business to minimize the cost of compliance for the business. It would be wonderful if this was so, but it is not. Dishonest inspectors who abuse the regulations or attempt to force the business to make unnecessary payments or fines can do great harm not only to the business but also to the general welfare. This topic will be taken up in more detail later in the report (See Section Twelve, Table 12-11 and the related discussion).

4. Inspections by Industry

Inspections of firms vary considerably with industry. This is consistent with the application of differing rules focused on specific industries or on issues which are clustered in specific industries. The distribution of inspections by industry is shown in Table 3-6.

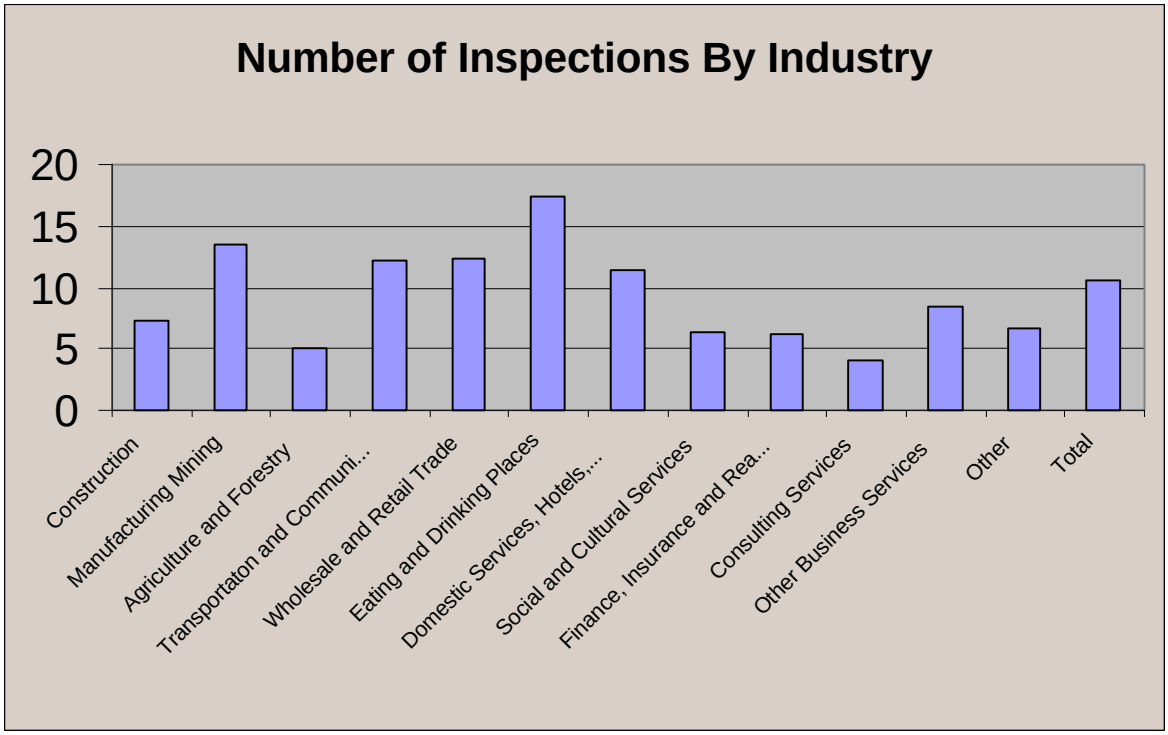
Table 3-6. Average Number of Inspections for the Six Months Prior to the Survey, by Inspecting Agency and Industry

Inspecting Agency	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Average
Tax Agency	2.4	5.0	1.6	3.5	4.5	5.4	3.1	1.7	3.2	1.4	4.7	1.7	3.6
Fire Department	1.6	2.3	0.8	2.1	1.6	2.3	2.4	1.3	0.8	1.1	2.7	1.2	1.8
Police Department	0.5	0.8	0.5	3.0	1.1	2.4	1.5	0.4	0.8	0.2	0.2	1.2	1.1
Sanitary/Epi-demic Station	0.9	2.1	1.0	1.5	2.3	4.4	2.3	1.6	0.2	0.5	0.2	1.0	1.8
Ministry of Environment	0.3	0.7	0.3	0.7	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.4
Committee on Standard-ization	0.3	1.0	0.3	0.4	0.4	0.5	0.3	0.3	0.1	0.2	0.1	0.3	0.4
Consumer Protection Committee	0.1	0.4	0.2	0.3	1.4	1.4	0.6	0.3	0.1	0.1	0.2	0.1	0.6
Anti-Monopoly Committee	0.0	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.4	0.0	0.1	0.1	0.1
Department of Architecture	0.6	0.2	0.1	0.1	0.2	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.2
Other Agency	0.6	0.9	0.2	0.7	0.5	0.2	0.7	0.4	0.6	0.4	0.2	0.6	0.6
Total	7.3	13.5	5.1	12.2	12.3	17.4	11.4	6.4	6.2	4.0	8.5	6.6	10.6

The variance by industry is large, with Eating and Drinking Places being inspected an average of 17.4 times in six months, while firms in the Consulting Services received only four inspections over the same time period. Eating and Drinking Places also placed first for Tax Agency inspections with 5.4 inspections in six months. Manufacturing and Mining firms were the second most favored agency for the Tax Agency, with five inspections in six months. Some agencies appear to have favorite industries, while other agencies inspect more or less equally across the board. Attention from the Fire Department and the Police Department varies considerably, with Transportation and Communications receiving the most Police inspections. The Fire Department focused most heavily on the Domestic Services, Hotels and Recreation Industry, with Manufacturing and Mining just behind. Manufacturing and Mining, and

Transportation and Communications appear to be the most favored of the more heavily populated industries.

Figure 3-2: Number of Inspections by Industry



5. Inspections and Fines

Inspections are intended to find violations and to correct them. The regulatory authorities appear to have broad authority to issue fines and to take significant steps to make firms pay the fines. Yet the Tax Agency finds fault in only 60 percent of the inspections made during the period covered by the survey. The Police Department and the Sanitary/Epidemic Stations also find violations in only two out of three inspections. Other agencies have higher proportions of violations, but only the Anti-Monopoly Committee finds violations in more than nine out of 10 inspections. It appears that the rate of violations found in all agencies does not vary by size of firm, with the exception that very small firms, those with zero employees did appear to have more favorable experiences, with fewer violations per inspection than larger firms. Table 3-7 provides details about the proportions of violations found by size of firm and by inspecting agency.

Table 3-7. Percent of Inspections in Which At Least One Violation Was Found During the Six Months Prior to the Survey, by Size of Firm and Inspecting Agency

	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251+ Employees	Total
Inspecting Agency	Zero	1-5	6-10	11-50	All Small			
Tax Agency	47.2	59.9	70.9	60.5	62.5	62.1	58.3	61.2
Fire Department	58.3	70.7	71.2	71.1	70.8	73.1	70.5	71.5
Police Department	37.0	69.2	72.0	72.4	65.5	66.6	67.1	66.4
Sanitary/Epidemic Station	55.3	65.1	64.7	58.7	61.1	65.7	64.1	63.5
Ministry of Environment	---	77.8	87.5	86.9	85.0	82.9	83.3	83.4
Committee on Standardization	---	70.8	80.8	84.9	82.5	78.8	77.6	79.2
Consumer Protection Committee	41.7	71.5	82.7	77.1	76.5	71.7	64.5	72.9
Anti-Monopoly Committee	---	100.0	75.0	100.0	94.4	100.0	84.2	92.6
Department of Architecture	25.0	100.0	100.0	95.8	93.8	85.2	75.7	86.3
Other Agency	76.7	76.7	79.5	70.3	73.8	70.7	75.9	73.4

The Administration has already taken some impressive steps to lower regulatory burdens. Many of the regulatory agencies within the Administration appear to have responded to leadership, and also appear to have taken some initiatives on their own to improve the manner in which rules and regulations are enforced. Much more can be done to improve regulatory practices and minimize the time and cost burdens imposed on all businesses. Continued improvement would help make the entire Ukrainian economy more productive. Smaller businesses, in particular, would be helped more than larger businesses by any improvements in the inspection process or in the drafting and implementation of regulations.[19]

[19] The State of Small Business in Ukraine report issued by the International Finance Corporation in May 1999 provides more extensive detail about registration, licensing and inspection practices, including recommendations for change. The discussion may be found in pages 12-18 of the Report.

IV. BUSINESS MANAGEMENT ISSUES

A. BUSINESS MANAGEMENT PRACTICES

Businesses in the Ukraine need to improve management practices and the overall quality of business management. The same statement can be made about businesses in any other country, including the most developed of the Western or Asian countries. Smaller businesses in these countries particularly need to learn how to apply modern business techniques and tools to their businesses. Most businesses today, even very small businesses can probably improve management by introducing computers into their management activities. Inventory management, accounting, financial control systems, pricing, and communications are all increasingly dependent on the use of computers.

The prices for computers have fallen steadily and dramatically in recent years. The price of using computerized systems is not the purchase price of the machine, but the cost of learning how to use the machine and the programs available for it to sharpen management practices. This section examines some business management activities in the Ukraine. The report also asks if owner/managers have received expert assistance or if they have joined business organizations that might be able to help with management improvements.

Table 4-1 shows the results when owner/managers were asked if they had undertaken and accomplished certain business activities.

Table 4-1. Percent of Businesses Reporting Certain Management Activities, by Size of Business

Has Your Business?	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Prepared a Detailed Written Business Plan?	15.8	21.6	28.0	34.6	28.6	48.0	61.9	40.1
Prepared a Request for Financing?	7.0	15.1	18.6	22.8	18.9	35.2	48.0	28.8
Conducted Formal Market Research?	13.3	29.1	38.9	36.8	34.1	42.2	48.8	39.0
Prepared a Written Marketing Plan?	6.1	14.0	18.0	20.8	17.6	26.9	37.2	23.8
Worked With a Business Consultant?	7.9	10.8	16.2	14.9	13.8	18.5	23.2	16.8

The answers to the business management activities questions are organized here by size of business, Larger firms reported that they were more active in accomplishing these activities than smaller businesses. Medium-sized businesses were, predictably, in the middle of the distribution. Business owners were not given extensive definitions of what constitutes a good business plan. They were given the clue that the plan should be written and should be detailed. It was the owner/manager's judgment to decide if their business met the test of a "detailed written plan". More than sixty percent of managers in large businesses claimed to have produced a business plan. Less than 30 percent of small business owner/managers said the same. The owners or managers of medium-sized businesses were in the middle, as usual, with 48 percent saying they had a plan.

Only a fourth of the respondents said they had prepared a request for financing. Later in the report, when financing and credit issues are examined, only 20 percent of respondents will say that they applied for a loan. Of those applying for loans, 40 percent were successful. Eight percent of businesses (.40 times .20) received loans. The proportion of respondents answering yes to these questions is consistent.

Forty percent of owners said they had conducted formal market research, but only one-fourth had completed a written marketing plan. Only one in six respondents had ever worked with a business consultant. There is a consistency across the size dimension in all of these answers. The proportion answering yes increases as the size of business increases. This is the norm in every country. The implication of this linear increasing relationship, of course, is that larger businesses are more likely to have used any good management technique. If the techniques have real value, then smaller businesses will be less well run than larger businesses. Learning good management techniques is not an overly time consuming or difficult process. The techniques have been documented extensively in every Western country and most Asian countries, so that good learning materials can be made available. Many small business owners have to be convinced that there is a real value to improving management practices, before they will agree to begin the learning process.

1. Business Assistance

A second set of questions asked owner/managers if they had ever received assistance from outside experts and in what form they received assistance. The responses are summarized in Table 4-2.

Table 4-2. Percent of Firms Reporting That They Have Received Assistance With Basic Management Functions, by Size of Business

	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Management Training Programs?	2.6	2.5	4.8	6.5	4.8	7.7	13.2	7.2
Business Consulting?	1.8	3.9	7.6	7.7	6.4	8.8	13.4	8.4
Obtaining Credit/Loans?	1.8	1.1	2.7	3.1	2.4	4.5	8.4	4.1

The usual response curve or relationship is also found in these answers. Larger firms are more likely to have been involved in management training programs, worked with a business consultant, or received expert assistance in obtaining credit than medium-sized firms. Medium-sized firms are more likely to have received assistance than smaller firms. The important finding in the Table is, however that very few firms, small, medium or large have received such assistance. This is disappointing news for the many aid donors who have focused major parts of their business assistance efforts on providing help with these activities.

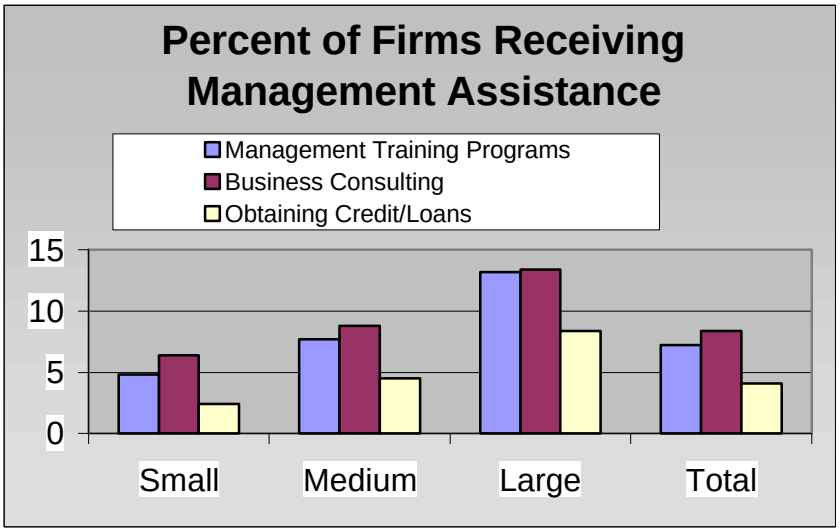
Getting business owners to admit to ignorance or to do anything to overcome the ignorance can be a difficult problem. In the U. S. small business owners work an average of 65 hours per week. They are spending so much time in the business, that they have neither time nor energy to seek assistance. In Europe, most governments sponsor a variety of business assistance programs. Many of these programs focus on helping businesses accomplish some major management activity. A large number of programs focus on the problem of obtaining credit or getting a loan. A number of the assistance programs blanket the entire country, with business assistance centers in many major cities. Many of these programs do not appear to accomplish their intended goals.

Some of the programs do provide short-term help by actually doing something that the business needs to do. In Eastern Europe, for example, both the European Community and the United States have sponsored business assistance centers dispersed throughout the Eastern European countries. Similar programs are in place in the Ukraine. These centers have been staffed with professionals from abroad and with local experts if they are available. The centers have usually focused on helping businesses to complete management plans, complete loan requests and obtain funding, and improve marketing research and practice. Almost all of the programs have been started with a clear goal of becoming self-funding within three or four years. These centers have,

for the most part, been complete failures. The problem is not that the personnel in the centers don't know what they are doing. They are management experts.

But the very structure of the programs works against them providing much in the way of long-term benefits. Most of the programs, particularly the European-funded programs are associated with pools of loan funds. The theory has been that local banks and banking systems have not been up to the job, so the center can use the availability of funds to encourage businesses to learn more about applying for funds and putting the funds to good use. But such programs fail for two main reasons. The existence of loanable funds helps to focus business owners on obtaining such funds. It focuses them to the point that they will concentrate on nothing else, including putting time into learning and applying basic management techniques. So the education mission of the center takes second place to the financing mission. The second reason for failure is the goal of achieving self-funding for each of the centers. The center staff soon finds that it is easier to prepare and sell a business plan to an owner, than it is to teach the owner how to create his/her own plan. The centers ending up "doing for" the owner, rather than assisting the owner "to do" something for himself. In return the owner/managers pay for the services rendered. The experts in the business assistance centers become paid consultants rather than teachers/counselors helping business people to learn.

Figure 4-1: Percent of Firms Receiving Management Assistance



The United States pioneered such assistance programs more than 30 years ago. Today there are more than 1000 such centers in the United States, cofunded by the National government and the regional or state governments. The program has been so successful, that many cities have volunteered to provide supplemental funds in order to have one of the centers placed in the city. The centers, called Small Business Development Centers (SBDC's) have learned some important lessons that probably apply equally in the Ukraine.

- First, the SBDC does not attempt to become self-financing. It is assumed that the SBDC will always receive the majority of its budget from government funds.

Minimal fees are charged for training courses and seminars, to cover out-of-pocket costs such as renting space, preparing materials, etc. The nominal charges made for each course do not cover salaries, or the associated costs of operating the centers.

- Second, the SBDC's mission is to counsel business owners and help educate business owners. Counseling, as opposed to consulting, means advising someone on what to do in a given situation, and helping them to learn how to do it. Counselors do not do things for their clients, they help the clients to learn and to do things for themselves.

- Third, the SBDC's do not have access to loanable funds. The SBDC counselors can teach you how to prepare a finance request, or they can critique a loan request prepared by a client. The counselor's will not prepare the loan request under any circumstances.

- Fourth, the SBDC's are experts at marketing.[20] And they are given the flexibility to adjust course offerings and marketing devices to satisfy local needs. Minimal central direction is provided to each SBDC. The program is intended to be driven locally, to meet the expressed needs of its local customers.

- Fifth, it is assumed by the SBDC counselor's that the business owner seeking help must commit (contract) to do the necessary work. If the business owner does not take the initiative to seek out the center, and agree to complete the necessary learning needed to support his request for help, then the center will not work with the client.

- Sixth, the center will act as a library and reference center, providing many of the excellent written materials that are available in the U. S. to clients at cost, or free, if the program can find a co-sponsor to bear the cost of the written materials (or cassettes, compact discs, or other media)

- Seventh, the SBDC acts as a networking center that works with all of the local organizations and individuals that are interested in working with and helping smaller businesses. Local bankers, for example, soon learn that the SBDC counselors are a major free resource to help the banker with potential loan clients who have not prepared an adequate loan request or a good business plan to support the financing request. The banker will suggest that the loan applicant seek counseling assistance at the Center. The business assistance can work in the other direction. Because the SBDC counselors have helped the banks to make good loans, the counselors can ask the bankers to teach a course or a seminar in how to apply for a loan. Another form of networking occurs when a counselor identifies a client that has experience and talent and has prepared a good business plan. A word from the counselor is usually sufficient to get the client to meet the banker, who understands that the counselor would not suggest a client to the banker unless the client met or exceeded the bank's

[20] Most SBDC's are staffed by a minimum of two professionals, one trained in general management and/or business finance, and one expert in marketing. Most of the staff have advanced degrees and many years of experience working with or in businesses.

lending standards. Incidentally, the SBDC counselors cannot accept funds or payment of any kind for this type of assistance.

In the end, the counselor does sometimes get involved in helping a client obtain capital for his/her business. But the help comes not because the counselor has promised to do something for the business, but because the client has accomplished the learning needed to support the request for funds.

The SBDC program services more than 500,000 business owners in the course of a year. It should not be looked on as a special interest program targeted at small business owners, but as an education program which is a vital and necessary part of general education. The cost of such education is very little compared to the benefits produced by the program. Obviously, the business owner benefits, but so do the new workers in the business as the business expands, and so do the customers who receive better products or services at more reasonable prices. The State gains through increased tax payments from both businesses and workers, and through decreased demand for State support services. Many SBDC clients work for years to improve their management capabilities, others need help only occasionally. The flexible delivery system can work effectively to meet their needs. Given the evidence about how many Ukrainian owner/managers do not carry out some of the most basic management techniques and practices, a similar program would be a good investment. If State funds are not available, funds should be sought from multilateral or bilateral economic aid programs. Larger foreign firms seeking to make investments in the Ukraine might be encouraged to sponsor or cosponsor one or more centers

The NewBizNet program sponsored in the Ukraine by the U. S. Agency for International Development, has many of the features of a good SBDC. NewBizNet does focus some of its effort on other important projects such as helping develop better business support policy, and helping business associations to become more effective.

2. Business Associations

Are business association such as Chambers of Commerce, industry associations and related organizations important for Ukrainian business? Do Ukrainian business value such organizations and join them? Would the typical businessperson become a better businessperson by joining and participating in such an organization? The survey asked if the respondents belonged to one or more business organizations. The results are shown in Table 4-3.

Table 4-3. Percent Reporting Membership in Business Organization, by Organization and Size of Business

Organization	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Local Chamber of Commerce	0.9	2.9	2.5	3.7	3.0	7.1	15.5	6.6
An Industry Organization	---	0.7	0.8	1.4	1.0	5.5	19.5	5.9
A Trade Association	---	1.1	0.6	3.0	1.8	3.3	4.2	2.6
Union of Ukrainian Entrepreneurs	1.8	3.0	4.4	5.7	4.5	6.6	19.1	8.0
Another Business Organization	18.9	8.9	10.7	11.0	10.8	20.2	20.1	15.0

The pattern of responses looks familiar, the larger the firm, the greater the probability that they belong to any organization. In this case, however, smaller businesses may have the advantage. Look at the Chamber of Commerce answers above. Large businesses are five times as likely to join the Chamber as small businesses. But there are about three million small businesses and only 10,000 or so large businesses. Three percent of three million is 90,000 members. For the large firms, 15 percent of 10,000 is only is only 1500 members. If the organization is organized around democratic principles (one member, one vote) then the small business owners may control the organization. But the odds are that the Chamber runs on the principle that he who pays the dues sets the rules, with larger businesses paying much higher dues than smaller businesses, and voting power is a function of total dues paid.

The situation in the Chamber is a local one, because we are talking about a local organization. But many countries have a National Chamber. In the national case, a few larger businesses may end up setting the policy tone for all businesses by dominating the National Chamber's lobbying activities with the Parliament and the Ministries. Will policy that is good for larger businesses be good for smaller businesses? Sometimes. But in many cases, the best policy for large and small businesses is not the same policy. At that point, smaller businesses are best advised to have control of the organization they belong to—or the organization will support larger member's interests. This argument holds equally for industry and trade associations, and for the Union of Ukrainian Entrepreneurs. Smaller businesses must be aware of the need to organize to protect their interests. Existing organizations may or may not be the best vehicles for that purpose. It is easy to check an organization, however, to see whose interests are most important to the organization. If large business interests control a given organization, smaller businesses must organize to gain control, or must organize a competing organization that has small business

membership only. Either alternative is expensive—it costs good money and takes a lot of time to bring people together in a good business association, but there are important issues at stake.[21]

Can smaller Ukrainian businesses be assured that their interests will be represented before the Ukrainian government or the Parliament? Not if the smaller businesses stand aside and let larger business interests control most business organizations as they do in many countries. It is easy to say that I will wait for my neighbor to join the organization and trust him to look out for my interests. If your neighbor thinks the same way, however, and neither of you joins, then no one represents your interests.[22] Smaller businesses will not be safe from the negative impacts of rules designed in favor of larger businesses, unless smaller businesses join together to effectively represent themselves. Table 4-3 says they have a long way to go.

[21] The largest small business organization in the United States, the National Federation of Independent Business (NFIB) has grown to more than 500,000 members, roughly one-tenth of the businesses with employees in the United States. It took almost 50 years to accomplish this feat. Each year, in order to maintain such a large membership, the NFIB spends one half of its $75 million budget on recruiting. This expenditure is the cost of democratic organizing. The reward is that the NFIB is considered one of the most powerful representative organizations in Washington, and small business owners can be assured that their interests will be considered as the Congress and the Administration consider new legislation affecting smaller businesses.

[22] This is called the "free rider" problem in the United States. Everyone would like to be the free rider, and count on his neighbor to join the organization, do the work, and represent his interests. But, if everyone wants to be a free rider, then no one joins and small businesses lose out. The price of representation in a democratic situation is that each small business owner has to take part (spend money, join the organization, take time to participate) in order to be sure that smaller business interests are considered in the decision making process that produces new law and new regulations. There may be a cultural bias against such activities in the Ukraine, but the government will not know whether it is doing the right things to support smaller businesses, until smaller businesses organize themselves to provide the feedback to the government.

V. BUSINESS SALES TO GOVERNMENT AND USE OF BARTER OR IN KIND RELATIONSHIPS

1. Sales to Government

The Government of the Ukraine and State-owned businesses in the Ukraine still represent a sizable portion of the total economy. One would expect to find that government is a major buyer from private businesses. The owner/managers were asked to identify the percentage of their products or services that were purchased by government agencies through "state contracts." Table 5-1 shows the responses to the question organized by employment size of business.

Table 5-1. Percent of Firm Production Purchased by the Government, By Size of Business

Percent of Product Purchased by the Government	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
None	97.3	92.6	88.4	83.4	87.7	71.3	68.9	79.9
1-5 Percent	2.0	2.5	2.7	4.1	2.3	4.1	3.5	3.0
6-10 Percent	0.9	0.4	1.51	1.3	1.1	3.6	4.1	2.3
11-50 Percent	1.8	1.4	2.5	4.5	3.1	7.0	7.0	4.8
More Than 50 %	---	3.6	5.0	8.2	5.8	14.1	16.4	10.0
Number of Firms Reporting	113	555	518	957	2143	929	798	3870

Small businesses are least likely to sell to the government, with almost ninety percent (87.7 percent) reporting that they sold none of their output to the government. Most medium-sized and large firms also sold nothing to the government. The medium-sized and larger firms that did sell to the government, however, were more likely to sell a large portion of their output to the government. About one in six large firms reported that they sold more than 50 percent of their goods and services to the government. Only 5.8 percent of smaller businesses sold this large a share of output to government agencies. With the exception of about one in seven medium-sized firms, and one in six large size firms, very few businesses sell significant amount of output (more than 50 percent of output) to the government.

What percent of sales to government agencies is by State-owned enterprises. Assuming that the bulk of the sales to government are made by those firms that sell more than 50 percent of their

output to the government, we can look at the distribution of these firms by state ownership and private ownership. This is done in Table 5-2

Table 5-2. Number of Firms Reporting That More Than 50 Percent of Sales are to Government Agencies, by Type of Ownership and Employment Size of Firm

Type of Business	EMPLOYMENT SIZE OF BUSINESS			
	Small 1 to 50 Employees	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
All Businesses	124	131	131	386
Privately-owned or Controlled	91	57	52	200
State-owned or Controlled	33	74	79	186

About 60 percent of the large firms with large sales to government agencies turn out to be State-owned enterprises. Since these State-owned enterprises have an average of 1232 employees compared to the average employment of 689 for large privately-owned businesses, it is likely that the much more than 50 percent of total sales to the government is accounted for by State-owned enterprises.

The converse of this statement is much more important. Government agencies are really not a significant source of demand for most businesses. A total of 798 large businesses answered the question about government sales (Table 5-1), of these 569 had no sales to the government, and only 52 privately-owned businesses had significant sales to the government. The numbers are even more lopsided for medium-sized and smaller businesses.

The policy implications here seem very clear. The emphasis in policy to help businesses to expand sales should be on helping businesses to find private clients. It may be worthwhile to establish rules requiring government agencies to buy a larger share of goods and services from smaller businesses, but this should be seen as a secondary realm for business assistance policy. The private firms in the Ukraine sell primarily to other private firms or to the public. Programs to educate Ukrainian firms about quality standards, improved quality control techniques, (ISO 9000 certification, etc.) will help these firms to market goods in both East and West. If the State wants to use some (even a relatively small) portion of its funds to purchase more goods and services from small private firms, good program models can be found in England, France, Germany, and the United States. This type of program can have some impact on the development of the private sector in the Ukrainian economy. It can also help insure that the Ukrainian government doesn't pay excessive prices for goods and services because competition is too limited.

2. Bartering for Raw Materials, Supplies, and Equipment

One aspect of a capitalist economy is that firms and consumers in the economy use a price system for almost all transactions. That is, both firms and consumers use money (cash, checks, credit cards, etc.) to purchase goods and services. The prices for goods and services are established by competition between suppliers that are anxious to make or increase sales and consumers who wish to buy a particular good or service. Money is generalized purchasing power. A unit of money can be used to buy some units of an enormous variety of goods and services. Barter, on the other hand, requires a "double coincidence of wants." One party to a potential transaction has to have what the other party wants, and vice-versa. It takes significant amounts of time to find another party that wants to trade specific goods or services to you for goods and services that you can provide. Marketing and selling costs, therefore, are much higher for barter transactions than for money transactions. One implication that follows from this is that enterprises that have to spend more time and effort on selling have less time and effort available for production.

Despite the apparent superiority of a price system and the use of money, many transactions in a Socialist economy have traditionally been done on a barter basis. This may have been because the government was interested in some transactions for purposes other than obtaining the best price. A barter trade might be made to curry favor with the supplier, or to accomplish a political goal, or to strengthen a strategic relationship insuring that a scarce commodity will be made available (Many countries seem to barter for insured access to supplies of oil or gasoline, for example). Barter might also be used when a cash customer could not be found for some products.

In an economy that is transitioning towards a capitalist model,[23] more and more transactions should be market-based exchanges where money or some close substitute for money is traded for goods and services. Such transaction will make the economy more efficient. Table 5-3 shows the results of a question which asked business owners: What percent of your enterprise's (business's) raw material, supplies and equipment are obtained through barter?

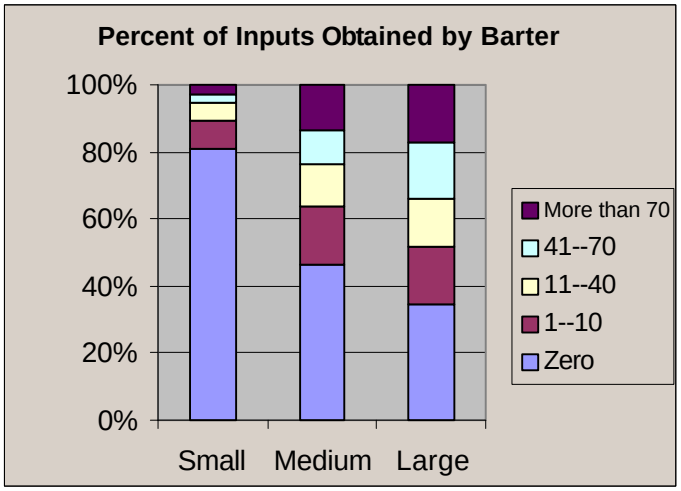
[23] Or what is better described as a mixed model, since almost all economies have some sectors that do not operate on a capitalist basis. Governments usually operate on the socialist model, for example, and in the United States, both the cooperative sector, which features joint or common ownership of facilities and equipment to be used for the general good of the shareholders, and the charitable sector, are operated on a non-profit basis. These types of activities now account for approximately 10 percent of Gross Domestic Product in the United States.

Table 5-3. Percent of Firms Reporting Percent of Raw Materials, Supplies, and Equipment Obtained Through Barter, By Size of Firm

Percent Obtained Through Barter	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Zero Percent	93.0	85.1	79.2	72.3	81.0	46.1	33.5	65.0
1-10 Percent	3.7	6.6	9.1	13.3	8.9	16.7	16.1	11.9
11-40 Percent	2.3	3.1	7.4	6.5	5.0	12.4	14.3	8.3
41-70 Percent	1.8	2.1	1.9	3.9	2.7	10.3	15.6	6.6
More than 70%	1.1	2.6	2.1	4.3	2.8	13.5	16.8	7.6

Smaller firms generally don't use barter to obtain raw materials, supplies, or equipment. More than 80 percent say they never use such transactions and only 10 percent of the small firms use barter for more than 10 percent of their inputs. Medium-sized and large firms are much more likely to use barter to obtain inputs, and to use barter for a much larger share of total inputs than smaller firms. In this sense, the smaller firm sector is much closer to the Western capitalist mode of doing business. About one-sixth of the large firms, and one-seventh of the medium-sized firms are very dependent on barter as a means of obtaining inputs for the production process. Somewhat surprisingly, medium-sized and large private firms are slightly more likely than State-owned firms to be very dependent (more than 70 percent of purchases) on bartering for inputs.

Figure 5-1: Percent of Inputs Obtanied by Barter



3. Bartering for Sales

Firm owner/managers were also asked how extensively they used barter to sell goods or services. Their answers are shown in Table 5-4

Table 5-4. Percent of Firms Reporting Percent of Sales Through Barter, By Size of Business

Percent of Sales Bartered Rather Than Cash	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Zero Percent	89.4	84.3	78.5	71.2	79.5	43.1	31.8	63.1
1-10 Percent	4.2	7.0	10.7	13.5	9.5	18.8	21.3	13.6
11-40 Percent	3.5	4.1	6.8	7.0	5.5	14.3	14.6	9.0
41-70 Percent	1.8	2.1	1.9	3.9	2.7	10.3	15.6	6.6
More Than 70%	1.1	2.6	2.1	4.3	2.8	13.5	16.8	7.6

The distribution of answers to this question, by size of firm responding, is almost the same as for the prior Table that showed the use of barter for inputs. Although the data have not been sorted to see if the same firms answered both questions in the same manner, that is the likely case. Firms that are dependent on barter for obtaining inputs are probably larger users of barter for sales. If the hypothesis is correct as stated, then the conclusions reached earlier with respect to the use of barter for inputs also hold. Smaller firms are less prone to use barter for either purchases or sales, and smaller firms, therefore are operating in more capitalist-style markets. These markets usually feature more than one seller, and numerous buyers. Supply and demand for good or service therefore determines a market-clearing price (from the point of view of the seller this is the lowest price that will convince him to supply the item; from the point of view of the buyer it is the highest price he will pay for the good).

In barter transactions there is no active market with many buyers and sellers bidding and offering prices for the good or service being sold. The price, in this case the ratio at which one item is traded for another, is likely not to be the lowest price that could be obtained in an efficient market. Either the buyer or the seller may feel unsettled after the transaction, believing that he could have bargained for a better exchange ratio. This is much less likely to happen in markets where money is used for one side of the transaction.

Firms that engage in barter transactions may limit new purchases or new sales to old partners, since it is difficult to find other firms willing to participate in barter transactions. The lack of competitive bids in a market with many buyers or sellers will almost certainly lead to less than optimal exchange ratios for bartered goods over time.

VI. EXPORTS

Exports are often a constraining factor in an economy that is in transition or going through a period of rapid development. As the economy adjusts to changing conditions and begins to grow, the demand for foreign exchange may increase more rapidly than the supply of foreign exchange earned through exporting. Part of the resulting foreign exchange gap may be made up through multilateral or bilateral aid, but this aid, even under the most optimistic assumptions is unlikely to be sufficient to allow the economy of the Ukraine to grow at an optimal rate. The major problem appears to be that businesses in the Ukraine will need large amounts of modern machinery and equipment in order to bring production standards and efficiency up to levels that allow them to compete with Western companies. The funds needed to import this type of equipment (and most of it will need to be imported, since no country, including the Ukraine is a clear leader in every branch of technology) must come from export proceeds. It is a reasonable question to ask then how many firms export, how much of their output do they sell abroad, and where are their customers. Table 6-1 provides some answers to the first two questions.

Table 6-1. Percent of Firms Reporting Percent of Product Exported Outside the Ukraine, by Size of Business

Percent of Product Exported Outside the Ukraine	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Zero Percent	99.1	96.0	95.6	94.6	96.1	86.4	71.1	89.6
1-10 Percent	---	0.8	1.5	3.4	1.7	6.2	12.6	4.6
11-30 Percent	0.3	0.8	1.7	0.6	0.8	3.3	6.8	2.4
31-70 Percent	---	1.1	0.6	0.7	0.6	2.7	5.7	2.0
More Than 70 %	0.5	1.3	0.6	0.7	0.8	1.4	3.7	1.4

Smaller businesses are not a significant portion of the export sector in the Ukraine. About thirty percent of larger firms export good or services, compared to less than four percent of small firms and less than 15 percent of medium-sized firms.[24] Larger firms are more likely to export a larger proportion of their production to other countries. Almost 10 percent of large firms export more

[24] These numbers are similar to the numbers in the United States, but much of the export content of machinery and equipment exported by larger businesses in the United States is made by small and medium-sized suppliers to these large companies, which in many cases are more assemblers of products rather than manufacturers of products. Smaller businesses do not receive credit for these exports for several reasons, including the fact that the accounting required to track such outputs would be extraordinarily complex and expensive.

than 30 percent of their product. The Ukraine does have the capacity to generate foreign exchange earnings that can be used to buy more modern and productive equipment. This capability may be lower than it seems, however, if a sizeable component of exports is bartered for consumption goods (oil, energy), and if exports are directed at countries that do not have currencies convertible into hard currencies such as the German Mark, the Euro or the Japanese yen. Where do exports from the Ukraine go? Table 6-2 provides a limited answer.

Table 6-2. Percent of Firms Reporting Percent of Sales to Russia and Other CIS States, by Size of Business

Percent of Exports to Russia and Other CIS States	EMPLOYMENT SIZE OF BUSINESS			
	Small1 1 to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Zero Percent	33.3	28.1	22.7	26.6
1-10 Percent	23.8	35.2	35.1	32.5
11-30 Percent	8.6	12.5	10.2	10.5
31-70 Percent	9.5	10.9	16.0	13.1
More Than 70%	24.8	13.3	16.0	17.2
Number of Firms Reporting	105	128	225	456

The question isolates shipments to Russia and the former Russian Republics from shipments to Europe or other areas where payment is likely to be made in a hard currency or in a currency that can be converted to other hard currencies. Approximately 27 percent of the firms reporting said that none of their exports go to Russia or the other CIS states. Conversely, just over 30 percent of the respondents said that a sizeable portion of their exports went to Russia or to related countries. Of the firms that export more than 70 percent of their output to Russia or related states, more are likely to be small or large, with proportionately fewer from the medium-sized businesses. The relatively large proportion of respondents with significant shares of their output to Russia indicates that Russia is a major trading partner. It is unlikely that this trade will provide much in the way of convertible exchange, given Russia's non-convertible currency. This hurts the ability of the Ukraine to earn necessary foreign exchange.

If sufficient foreign exchange cannot be generated through current or anticipated exports, what alternatives do Ukrainian businesses have. One alternative is to settle for lower growth and slower development. The other is to seek partnerships or strategic alliances with foreign firms that can provide technology and capital as part of a joint venture. Foreign firms—and foreign direct investment can be the source of much of the capital needed to move the economy of the Ukraine to a faster pace of growth and to a better employment situation.

VII. BUSINESSES IDENTIFY THEIR MOST IMPORTANT PROBLEMS

Several studies have asked business people to identify the problems that seem most important to them. In the present survey the respondents were asked first to identify the single most important problem facing their business today. Fourteen responses were available on a card that was handed to each respondent. The respondents also had the option to specify a problem not found among the fourteen choices. After answering the question, interviewers asked what the second most important problem was, and asked the respondent to choose from the same fourteen choices shown to him earlier. Table 7-1 summarizes the responses to the first question.

Table 7-1. Percent Reporting A Problem as The Most Important Problem Facing Their Business, by Employment Size of Business*

EMPLOYMENT SIZE OF BUSINESS				
PROBLEM	**Small Zero to 50 Employees**	**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
Existing Tax System	43.9	49.8	47.4	45.8
Lack of Working Capital	10.1	15.4	18.3	12.8
Low Market Demand for My Products	11.5	8.0	6.5	9.8
Legislative Conditions	7.2	7.1	6.2	6.1
Inflation	8.1	2.8	3.2	6.1
Administrative Controls by Public Agencies	2.8	1.3	1.1	2.2

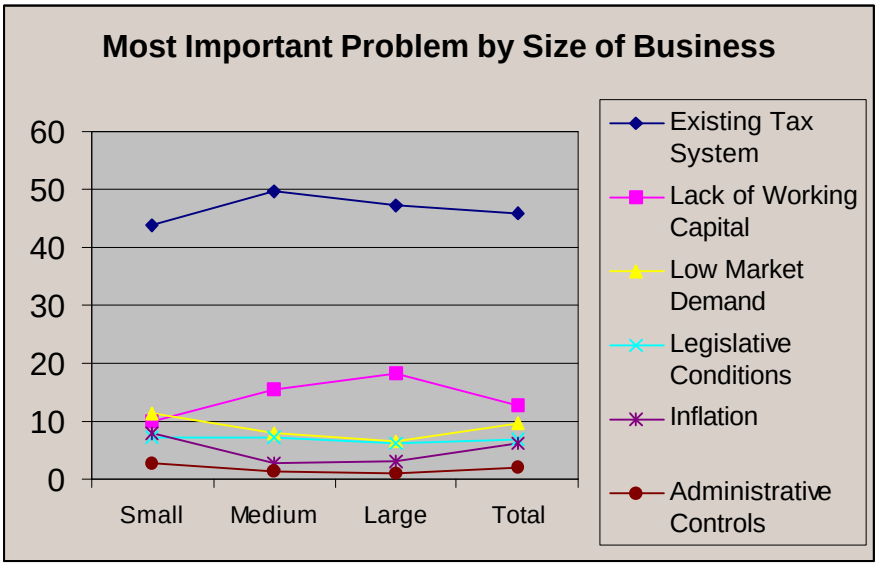
* Several other problems were identified, such as obtaining credit, interest rates, shortages of raw materials, labor availability and cost, etc., but the very low response rates indicated that these items were not.

1. Taxes

Five answers head the list of responses. The existing tax system is the overwhelming problem for most businesses. This is true across the entire size distribution of firms. Almost half of the firms surveyed agreed that the tax system was the most critical issue. Although this survey did not explore in depth the reasons for dissatisfaction with the tax system, an earlier study conducted for the International Finance Corporation,[25] indicates that business owners in the Ukraine are bothered most by the high level of taxes (95 percent), large numbers of different taxes (82 percent) and frequent changes in tax legislation and tax reporting (70) percent. As noted earlier, the tax authorities inspect businesses of all sizes more frequently than any other agency, and usually conduct longer inspections that require the company to devote more resources to support the inspection.

,[25] Obstacles to Small Business Development in the Ukraine, Kiev, Ukraine, October 1997. Pp.13, 14.

Figure 7-1: Most Important Problem by Size of Business



The severity of the feelings about the tax system leads many of the smallest businesses to attempt to stay out of the tax system entirely by not registering their businesses with the local officials or with the tax authorities. Almost all businesses that are registered attempt to minimize their taxes by not revealing to the authorities their true sales, revenues, and employment. The tax system seems to be a major incentive for businesses to remain in the underground or "gray" economy. It also, and, perhaps more alarmingly, is an extreme disincentive to firms to hire new workers. Payroll taxes per worker for social security and health purposes are much higher than in the United States.[26] In Section One it was noted that it the smaller firms, hiring their first new workers that generates more jobs than any other size group of firms in the economy. The transition to a capitalist economy with a dynamic and growing business sector is being severely hampered by the tax system. No one disputes that the State needs taxes to accomplish the many support activities that serve the people of the Ukraine. But a tax system which inhibits and the hiring of new employees, and which encourages underground activity seems far from the best system that can be used by the State.

2. The Shortage of Working Capital

The second issue on the most critical problem list is the problem of the lack of working capital. In almost every country, if there is one proposition that most small business people will agree to,

[26] Although not much higher than some of the Western European countries. It should be noted that these European countries have had a long-term problem with unemployment, unable to grow fast enough to generate full employment in their economies The United States, on the other hand, is operating at a full-employment level despite major ongoing immigration of workers from other countries. Given the unemployment situation in the Ukraine, the American model may be the better model for the Ukraine.

it is that they don't have enough capital. And lack of capital often is the most critical issue.[27] The situation in the Ukraine is more critical than in the Western countries for several reasons. Because the State held title to almost all physical assets, individuals held primarily cash assets. Inflation has reduced the value of these assets to almost nothing, eliminating past personal saving as a major source of investment capital. Continuing inflation, coupled with the uncertainty regarding the exchange rate of the hrivna, acts as a tax on the holding of money. Individuals faced with probable (but unpredictable) inflation tend to minimize holdings of cash in order to prevent a loss in the value of their holdings.[28] Until the property accounting system[29] is better developed, the transactions costs associated with property sales will tend to prevent individuals from trading equity ownership in property for funds that can be invested in business assets. A mortgage market also has to develop before individuals can decide more easily the form in which they wish to hold their assets (e.g. personal property versus business property).

The development of leasing markets will also help businesses attempting to minimize capital input costs to new or expanding businesses. Business owners will have the option with a lease of purchasing assets[30] or of renting assets. In a rental lease, title to the property being leased remains with the entity providing the lease. Leases may already be used extensively in the Ukraine for the purpose of obtaining the use of buildings or land. In the Western countries virtually any real asset (equipment, machinery, computer programs, furniture, etc.) can be leased. The current use of leasing will be discussed in a later section.

3. Lack of Demand for Goods and Services

The third problem cited as the single most critical problem by business owners is the lack of demand for their products or services. This demand problem may stem from two sources. First, the business may be producing a product or service that consumers do not want (or that sufficient numbers of consumers do not want), or they may be producing a low quality product or service for which consumers can find other, better quality, sources at equivalent or better prices. Second, there may be a lack of demand because many people are unemployed, or because many people are on extended unpaid leave, and these people lack the purchasing power to buy many products or services. In the first case, the solution lies with the firm, which must examine the reasons why their product or service is not selling, or why they are not making a profit on sales, and must decide if they can change something (lower costs, improve quality, lower price or any combination of these) to make the business more competitive. In a market economy the business

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[27] But several studies in the United States indicate that the perceived shortage of capital is often not as acute as the businessperson may think. Careful review of small business loan requests leads to the conclusion that most requests ask for more money than is needed for the proposed business investment. On one study, the review cut the initial requests by approximately one-third on average.

[28] Given the ready circulation of hard currencies in the Ukraine, individuals tend to hold cash balances in a hard currency form, and shift into hrivnas only when they are needed. This provides a hedge against inflation, assuming that the hard currency countries are inflating at a much lower rate than the Ukraine.

[29] A property accounting system includes a land cadastre or plot, a title system, a register for liens filed against property, and a mortgage register.

[30] This is called a capital lease. At the end of the lease term, the purchaser will have paid for the capital item and ownership of the property passes to the purchaser. Prior to the completion of the lease, the capital lease operates like a long-term loan. The lender has security in the property being leased, because title to the property does not change until the lease is completed and paid off.

owner doesn't have to choose to compete, but if other businesses make that choice, then the business owner must take the consequences of not competing effectively.

The more serious issue is the lack of demand due to the large proportion of the population that is not earning a wage or salary at the moment. This is a problem that must be dealt with at the government level, which must take steps to improve government economic policies. As the State moves away from a pure socialist model, the government cannot serve the role of employer of last resort. The government can work to stabilize the economy, lowering inflation rates, decreasing or eliminating the government deficit, and establishing an "enabling environment" which encourages private business to begin or expand businesses and increase hiring.[31]

4. The Problem of Inflation

Although some businesses are undoubtedly failing because they are not competing effectively in the market, many others are probably having problems with effective demand, because the government has not been able to develop the legislation and implement the rules that can stimulate the economy properly. Evidence for this conclusion comes from the next three reasons cited most frequently by business owners as most significant. The first of these reasons is inflation. Many businesses believe that inflation is hurting demand for their products. This is probably occurring because the inflation in the Ukraine, at a higher rate than many of its trading partners, plus the related depreciation of the foreign exchange value of the hrivna mean that any necessities of living which are imported or have a high import content in their production cost become more expensive. To the extent that these imported goods are necessities, consumers will spend a larger proportion of their funds on them, and they will have less money available for purchase of the domestically produced products which are not necessities. This may have a negative effect on many producers and sellers of goods and services in the Ukraine.

5. Two Governmental Problems: Legislative Conditions or Administrative Controls

The last two reasons cited most frequently after taxation deal with the State government and with the Parliament. Approximately three times as many businesses cited legislative conditions as cited administrative controls by public agencies as significant impediments to the development of business. Business owners want improved legislation to change the conditions that often inhibit their ability to improve their businesses. The desired legislation obviously begins with lower taxes and simpler and more stable tax legislation. It also includes many of the items noted in the definition of the "enabling environment." Business owners spoke clearly in defining their most significant problems. Business owners now must work to get their voice and their opinions

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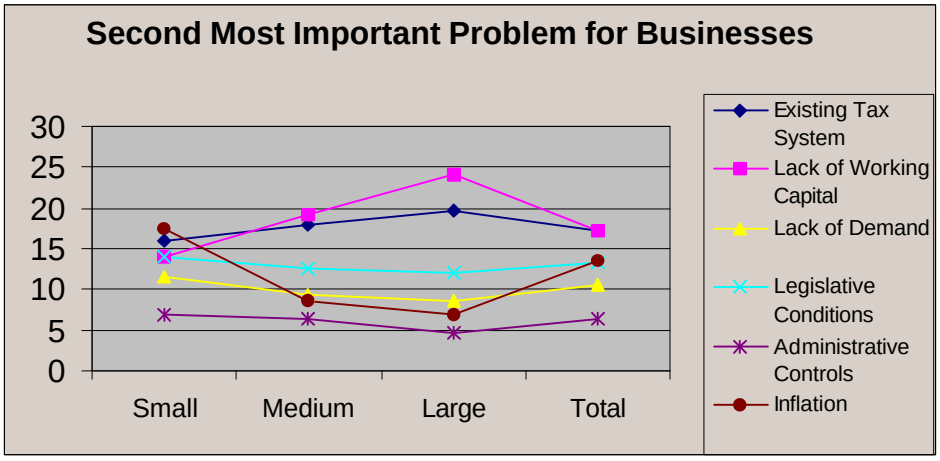
[31] The term "enabling environment" for business has been used extensively in the literature on the transition of economies in the Eastern Europe and the former Russian republics. The term may be defined slightly differently by different authors, but it generally includes changes such as: improved property law, improved contract law and better dispute resolution mechanisms either through the courts or through private mediation and arbitration, development of property registers and lien registers, bankruptcy laws and security laws, development of a modern commercial code, development of banking legislation and bank supervision mechanisms, a stable and effective tax system, membership in international organizations such as the World Trade Organization, liberalization of trade through elimination or minimization of tariffs, quotas and similar mechanisms, liberalization of prices in the economy, and development of enforceable employee rules governing health, safety, hours of work, etc.

to effect the legislation that is considered in the Parliament. As noted in the discussion of business organizations in Section Four, most business owners have yet to act by developing and joining business organizations which can carry their message to the law-makers.

6. The Second Most Important Problem for Businesses

Business owners and managers identified exactly the same problems as second most important as they identified in Table 7-1 above, although the rank order of the responses was changed somewhat. The responses to the question of the second most important problem are shown in Table 7-2 below. Dissatisfaction with the tax system remained in first place and lack of working capital was a strong second. Since almost half of all respondents had cited the tax system in their first answer the absolute number citing this problem fell from almost 50 percent to 17 percent. The absolute level of citations for each of the next five reasons increased in the second round.

Figure 7-2: Second Most Important Problem for Businesses



Lack of working capital almost displaced the tax system as the most cited problem in the second round, reinforcing that capital shortage is perceived to be a serious problem by a large proportion of businesses. Inflation was cited more frequently as a second most important problem than it was as first most important. Lack of effective demand was also cited more frequently.

The more interesting responses to the question of what is the second most important question facing your business are the responses dealing with legislative conditions and administrative controls by government agencies. More than twice as many businesses cited legislative conditions as most serious in the second round of answers, and almost three times as many identified administrative controls as a problem. The relative position of the two answers remained the same, however, with a larger proportion of business owners dissatisfied with the legislature than with the administrative agencies. Business owners clearly want changes in legislation. It does not appear that they are getting their message through to the legislature very well.

Table 7-2. Percent Reporting a Problem as the Second Most Important Problem Facing Their Business, by Size of Business*

EMPLOYMENT SIZE OF BUSINESS				
PROBLEM	**Small 1 to 50 Employees**	**Medium 51to 250 Employees**	**Large 251 or More Employees**	**Total**
Existing Tax System	16.1	17.9	19.6	17.2
Lack of Working Capital	14.0	19.3	24.2	17.1
Legislative Conditions	14.0	12.5	12.1	13.3
Inflation	17.5	8.5	7.0	13.5
Lack of Demand for Goods and Services	11.6	9.3	8.5	10.5
Administrative Controls by Government Agencies	6.9	6.3	4.7	6.3

*Several other problems were identified, such as obtaining credit, interest rates, shortages of raw materials, labor availability and cost, etc., but the very low response rates indicated that these items were not significant problems for most business owners in the Ukraine.

A last comment on the identification of significant problems is that small, medium and large businesses responded to the questions in almost exactly the same way. There are some minor differences in the rankings across size groups. Inflation, for example, is more important to smaller businesses than to larger ones, and lack of working capital is slightly more important as a second reason for medium-sized businesses. But the degree of unanimity in terms of what problems are identified, and the relative importance of those problems, is remarkable. Ukrainian business owners in differing industries and in differing business size groups appear to agree on many of the important impediments to the growth of their businesses.

VIII. RECENT BUSINESS SALES AND PROFITS, AND EXPECTATIONS FOR THE FUTURE

The survey questions included a section of questions asking business owner/managers about their sales and profits during the recent past, and also asked them about their expectations for sales and output in the near-term future. The responses provide a rich database that supports the development of a number of change indexes which are described in this section. Business owners were asked to look back six months and to provide their expectations for the next six months. The survey responses are analyzed here by size of firm and by industry.

A. BUSINESS VIEWS OF THE RECENT PAST

1. Sales Changes in the Past Six Months, by Size of Firm

Table 8-1 shows the percentage of firms reporting the percent change in sales for the previous six months.

Table 8-1. Percent of Firms Reporting Percentage Change in Sales in the Previous Six Months, By Employment Size of Firm

Have Your Sales Become	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
More Than 30% Lower	21.3	26.6	19.0	18.9	22.3	14.8	11.8	14.7
Between 16 and 30% Lower	18.5	18.5	19.3	20.6	19.5	17.0	16.8	18.4
Between 1 and 15% Lower	11.7	10.3	12.6	14.5	12.7	14.5	18.8	14.2
About the Same	40.3	30.6	31.1	30.8	32.6	32.1	27.2	31.4
Between 1 and 15% Higher	4.7	7.0	8.9	8.9	7.7	11.1	16.3	10.1
Between 16 and 30% Higher	2.1	2.7	2.8	4.4	3.3	6.6	4.3	4.2
More Than 30% Higher	1.4	2.4	2.4	2.0	2.0	4.1	4.8	3.0
Total Number of Firms Reporting	427	513	460	884	2284	836	750	3870

Owner/managers were asked to estimate the extent to which their sales had changed in the past six months by indicating a percentage range for the change. The respondents were given a choice of seven ranges, three lower ranges, one range for those businesses where sales stayed

about the same, and three higher ranges. About one-fifth of firms reported sales declines greater than 30 percent, another fifth experienced sales declines of 15 to 30 percent and approximately one-seventh reported lesser declines of between 1 and 15 percent. Sales in smaller firms generally did not hold up as well during the last six months as did sales for medium-sized and larger firms. More than 22 percent of small firms reported sales declines in excess of 30 percent, for example, while only 11.8 percent of large firms showed this big a decrease in sales. A larger proportion of small firms in all of the small size categories also reported more losses in the 15 to 30 percent lower sales category, compared to the medium and large firms. Conversely, a larger percentage of medium and large-sized firms showed sales increases in each percentage change category.

For those interested in a detailed picture of sales changes in businesses of different size, Table 8-1 provides considerable detail. The sheer volume of detail, however, can make it difficult to determine the most important findings from the data. One way of isolating information from this data so that it is more usable is to develop a sales index for the past six months. This is done in Table 8-2

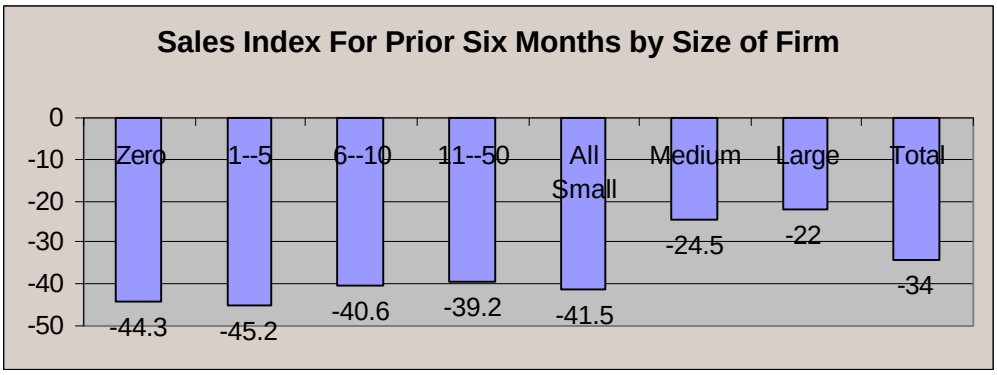
Table 8-2. Sales Index for the Previous Six Months, By Employment Size of Firm

Have Your Sales Become	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
A. Percent Reporting Higher Sales	7.2	12.1	14.1	15.3	13.0	21.8	25.4	17.3
B. Percent Reporting Lower Sales	51.5	57.3	54.7	54.0	54.5	46.3	47.4	51.3
C. = A – B = Sales Index for the Past 6 Months	-44.3	-45.2	-40.6	-39.2	-41.5	-24.5	-22.0	-34.0

The index is developed by adding all of the responses indicating an increase in sales (Line A), adding all of the responses indicating a decrease in sales (Line B) and subtracting one from the other (Line C). Firms reporting that their sales remained about the same are ignored. The resulting index or actually the resulting indexes for each size group and for total sales identify the general trend in sales with just one number. Each size group can be easily compared to the whole economy or to another industry by comparing just two numbers. For instance, the index for the whole economy is –34.0 indicating that 34 percent more businesses reported declining sales than reported increasing sales. The smaller firms did even less well, with the index reporting that 41.5 percent more small firms reported decreasing sales compared to small firms with increasing sales. Sales in larger firms held up much better than sales in smaller firms, with

the sales index of –22 much less than the sales index of –41.5 for smaller firms. Sales in medium-sized firms also held up much better than sales in smaller firms. Nevertheless, sales for all businesses and for all sizes of businesses declined over the previous six-month period (compared to the earlier six month period) as shown by the fact that all of the indexes are negative.

Figure 8-1: Sales Index for Prior Six Months by Size of Firm



2. Several Caveats

The sales index is not presented nor even recommended as the best way to display complex information about the extent to which business sales changed in the last six months. The index does provide a convenient and easy way to make comparisons, however. The index leads to the correct general conclusion that sales declined precipitously in the Ukraine during the six months prior to the date of the survey interview(s). Indeed, the level of the index (-34.0) is so low that it implies that the country is in a major depression or/and that it has suffered from a major shock, internal or external, which has greatly reduced consumer purchasing power during the six-month period. The August 1998 devaluation of the Russian ruble and the follow-on depreciation of the Ukrainian hrivna qualify as a major external shock.[32] Consumers, uncertain of the impact of this change may have held off from purchasing some goods and services. Goods and services imported from countries other than Russia became more expensive after the devaluation of the ruble and the hrivna. To the extent that people demand imported goods even when they become more expensive, their spending on domestic goods would probably decline. The immediate negative effect of a downward shift in the exchange rate should be at least partially offset in the future as the price of Ukrainian goods in foreign terms has decreased (except for Russia) and exports should improve.

[32] The government of the Ukraine has taken important steps in recent years in establishing and defending the exchange value of the hrivna. The large volume of trade between Russia and other former Russian republics still using the ruble means that the hrivna must decline when the ruble declines, unless the government wants to accept a major decline in trade with Russia. For many reasons, the government has made the choice to allow the hrivna to adjust so that essential trade can be maintained.

A second caveat has to do with the honesty of reporting by firms. Are respondents honestly describing the sales changes they experienced in the six months prior to the survey? Or are they exaggerating the level of decline and lowering the amount of increases. The answer is that the survey doesn't provide enough information to tell us the answer. The numbers are so negative, however, that it is a virtual certainty that sales did decline by a significant amount. It is impossible to say how honest the responses were to this question and to other questions asked in the survey. The survey staff reported that most respondents appeared to offer meaningful responses. All that can be done at this time is to look for cases where the response to one question is different from the pattern of responses to other related questions. If there is a difference, we will have to weigh all of the evidence from the survey to come up with the best estimate possible of the meaning of the inconsistent question.

3. Sales Changes for the Last Six Months, by Industry

In addition to analyzing sales changes by size of business, it might also be useful for policy purposes to understand how sales changed in various industries. Table 8-3 shows the industry detail.

Table 8-3. Percent of Firms Reporting Percentage Change in Sales in the Previous Six Months, by Industry

	Principle Sphere of Activity (Industry)												
Have Your Sales Become:	**Construction**	**Manufacturing, Mining**	**Agriculture and Forestry**	**Transportation, Communication**	**Wholesale and Retail Trade**	**Eating and Drinking Places**	**Domestic Services, Hotels, Recreation**	**Social and Cultural Services**	**Finance, Insurance, and Real Estate**	**Consulting Services**	**Other Business Services**	**Other**	**Total**
More Than 31% Lower	22.2	15.2	22.2	13.2	23.5	15.0	11.3	13.4	26.8	14.4	28.6	17.7	18.6
Between 16 and 30% Lower	19.5	14.4	15.6	20.9	21.6	24.8	19.5	14.7	10.7	15.1	12.2	17.7	18.4
Between 1 and 15% Lower	11.2	16.5	11.7	16.2	16.1	7.1	11.6	13.5	14.3	11.5	20.4	11.4	14.2
About the Same	33.1	28.7	33.3	29.8	25.6	34.5	43.5	40.4	21.4	42.4	22.4	39.2	31.4
Between 1 and 15% Higher	7.1	12.7	11.1	12.3	8.9	12.4	9.3	12.8	8.9	10.1	8.2	9.5	10.2
Between 16 and 30% Higher	3.7	7.3	4.4	3.4	2.8	4.4	2.5	4.5	7.1	2.2	2.0	4.4	4.2
More than 31% Higher	3.2	5.3	1.7	4.3	1.6	1.8	2.0	0.6	10.7	4.3	6.1	----	2.9
Number of Firms Reporting	492	850	180	235	1102	113	354	156	56	139	49	158	3884

Compared to the average change for all industries, sales declines appeared to be more precipitous in Construction and in Wholesale and Retail Trade, and less troublesome in Domestic Services, Hotels and Recreation, and in Social and Cultural services. Sales stayed roughly the same in about one-third of reporting firms, although only 25 percent of firms in Retail and Wholesale Trade maintained steady sales, and just over 20 percent of firms in Finance, Insurance and Real Estate held their sales levels. Relatively few firms managed to increase sales, and those that did report increases were clustered in the lowest increase category of 1 to 15 percent. Only a very small proportion of firms said that sales increased more than 30 percent. This was true for 10 percent of the firms in the Finance, Insurance and Real Estate industry, and for about 5 percent of the firms in the Manufacturing and Mining industries.

The analysis of sales change by industry can be simplified in the same manner that the analysis of change was simplified by enterprise size above. Table 4 provides a sales index by industry for the previous six months.

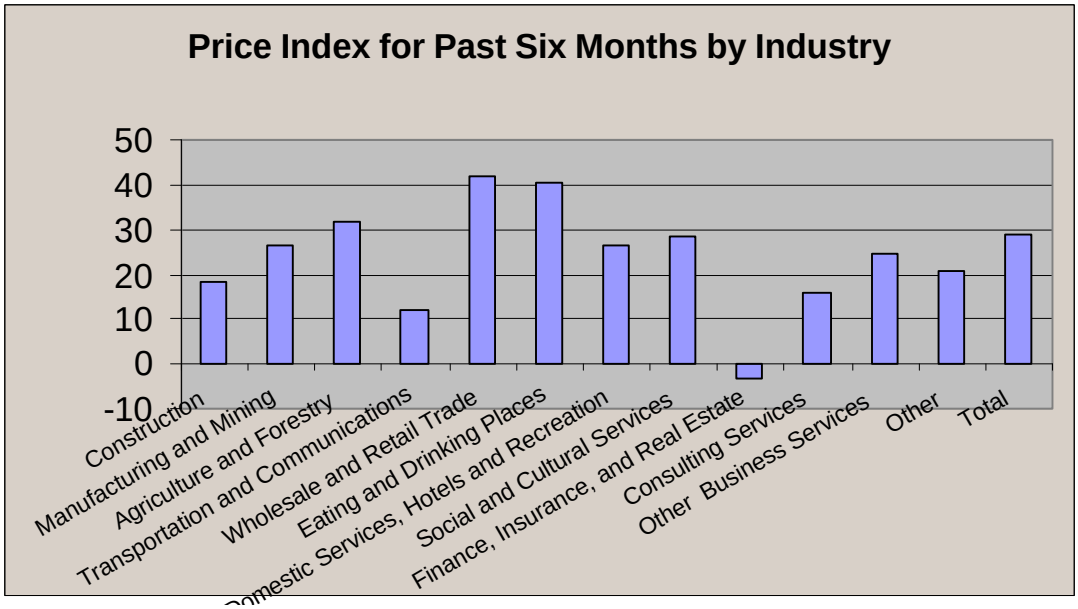
Table 8-4. Sales Index for the Previous Six Months, by Industry

	Principle Sphere of Activity (Industry)												
Percent of Firms Reporting Change in Sales	**Construction**	**Manufacturing, Mining**	**Agriculture and Forestry**	**Transportation, Communication**	**Wholesale and Retail Trade**	**Eating and Drinking Places**	**Domestic Services, Hotels, Recreation**	**Social and Cultural Services**	**Finance, Insurance, and Real Estate**	**Consulting Services**	**Other Business Services**	**Other**	**Total***
A = Percent Reporting Higher Sales	14.0	25.3	17.2	20.0	13.3	18.6	13.8	13.9	26.7	16.6	16.3	13.9	17.3
B = Percent Reporting Lower Sales	52.9	47.1	49.5	50.3	61.2	46.9	42.4	41.6	51.8	41.0	61.2	46.8	51.2
C = A – B = Sales Index for the Past Six Months	-38.9	-21.8	-32.3	-30.3	-47.9	-28.3	-28.6	-27.7	25.1	-24.4	-44.9	-32.9	-33.9

* The totals column for this index should be the same as the totals column for the sales index by size of firm (Table 2) Any differences are due to rounding error.

The sales index summed over all industries produces a total sales index identical to the sales index summed over all business size classes. Where the most significant finding in the size analysis was that smaller firms did less well than larger firms, the most important finding here is that the Retail and Wholesale Trade industry with an index of –47.9 did much worse than the average decline for all industries of –33.9. This finding helps explain why smaller businesses did less well than other sizes of business, since smaller firms are very heavily clustered in the Wholesale and Retail Trade industry.

Figure 8-2: Price Index for Past Six Months by Industry



Other industries reporting lower than average sales included the Construction industry where the sales index was down by-38.9), and Other Business Services which was down by –44.9. Manufacturing and Mining (-21.8) while still down significantly, had relatively good sales compared to the whole economy. The index was also better than average in the Finance, Insurance and Real Estate industry, and in the Consulting Services industry.

4. Reasons for the Change in Sales

Table 8-5. Percent Reporting Major Reasons for Change in Sales During the Past Six Months, by Type of Change

Major Reason for Change in Sales	Your Sales During the Last Six Months Were		
	Lower	The Same	Higher
Change in Inflation	48.6	26.6	25.5
Changes in Economic Conditions	48.1	24.6	22.2
Changes in Sales Prospects for my Products	24.4	15.9	30.7
Change in Interest Rates and Credit Availability	3.7	2.9	1.2
Changes in Average Sales Prices	20.2	13.6	25.0
Change of Prices for Raw Materials and Inputs	22.8	14.3	19.3
Change of Regulatory Environment (Inspections, Regulated Prices, Administrative Interference)	7.3	5.7	5.8

Changes in the Political Environment	6.8	4.6	1.9
Usual Seasonal Changes	21.8	14.9	32.7
Other	23.9	20.5	23.7
Hard to Say/Don't Know	2.4	27.2	3.9
Total Number of Firms Responding	1988	1176	667
Average Number of Reasons Cited as Important	2.3	1.7	1.9

The responses to the question of what major reasons caused the change in sales are organized into three groups, firm with higher sales, firms with lower sales, and firms whose sales stayed the same.

For the 1988 firms whose sales declined, inflation was the most frequently cited reason, followed by changes in economic conditions. Both of these reasons are consistent with major changes following a devaluation of the hrivna. Raw materials and other input prices were also cited as a major reason for the decline in sales, although this is an indirect influence. Presumably as the price of inputs and raw materials rose rapidly[33], product prices also rose, leading to a decrease in the quantity of the products demanded. Another reason cited was the change in sales prospects. Prospects changed, presumably because the depreciation of the currency lowered the real purchasing power of consumers.

The 667 firms that reported sales increases cited "changes in sales prospects for my products" most frequently. Presumably those businesses sold products that had little foreign raw materials or other foreign inputs. These products would tend to fall in price relative to imported products or products with a high import content. They also noted changes in seasonal conditions, average sales prices, and changes in inflation.

5. Changes in Net Profits in the Past Six Months

If sales are declining precipitously, as shown above, then net profits are unlikely to be improving for many businesses, although net profits may hold up better than sales in a given business, given the quality of management in each business. This is confirmed in the analysis below, which follows the pattern just used for analyzing sales. The analysis begins with a review of the detailed data by size, and then the more simplified data by size, after construction of a net profits index by size. The same pattern of analysis is then done by industry. Finally, businesses are sorted by the general response to the net profits question (Net profits decreased, stayed the same, or increased), and business owner/managers are asked what factors they thought affected their net profits over the six-month period.

[33] Suppliers of imported raw materials and other inputs could be expected to raise prices almost immediately, since they would have to replace any shipments out of inventory at foreign currency prices. If foreign suppliers of inputs kept warehouses in the Ukraine, then anything stored in the warehouses would also be marked up immediately.

Table 8-6 shows what reporting firms said about changes in net profits over the previous six months.

Table 8-6. Percent of Firms Reporting Changes in Net Profits During the Previous Six Months, by Size of Business

Was the Net Profit in Your Business:	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
More Than 100 Percent Lower	6.3	9.6	5.9	9.8	8.3	12.5	13.2	10.2
Between 31 and 100 Percent Lower	16.1	18.9	19.7	15.8	17.3	14.0	12.8	15.7
Between 16 and 30 Percent Lower	18.9	17.8	16.0	18.0	17.8	14.9	14.9	16.6
Between 1 and 15 Percent Lower	15.2	12.3	17.4	15.8	15.2	14.3	15.7	15.1
About the Same	35.0	32.5	32.4	30.6	32.2	31.2	28.5	31.3
Between 1 and 15 Percent Higher	5.6	5.7	5.4	6.8	6.0	8.4	10.5	7.4
Between 16 and 30 Percent Higher	1.2	2.3	2.1	2.7	2.2	3.4	2.6	2.5
Between 31 and 100 Percent Higher	1.4	0.6	1.2	0.5	0.8	1.0	1.1	0.9
More Than 100 Percent Higher	0.5	0.2	---	---	0.1	0.3	0.8	0.3
Number of Firms Reporting	429	471	426	843	2169	798	727	3694

Net profits can decrease or increase by more than 100 percent (by moving from a positive to a negative number, or vice-versa). This table is even more cluttered than Table 8-1, which showed similar changes for sales. Sales cannot decline by more than 100 percent, although they can increase more than 100 percent. Table 8-6 appears to confirm the same general pattern of change seen in Table 8-1. Shifting to a net profits index will make it easier to identify how a given size group of businesses did relative to other businesses.

The net profits index is even more negative than the sales index calculated in Table 8-2. The number of firms reporting negative changes exceeded the number of firms reporting positive changes by 46.5 percent. The net profits index was slightly below average for small firms, and

slightly above average for larger firms. The net profits can be easily compared to the sales index using the excerpt from Table 8-2 which is shown as Table 8-8, below.

Table 8-7. Net Profits Index for the Previous Six Months, by Size of Business

Percent of Firms Reporting Change in Net Profits	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
A. Percent of Firms Reporting Higher Net Profit	8.5	8.9	8.6	10.0	11.1	13.1	15.1	11.1
B. Percent of Firms Reporting Lower Net Profit	56.5	58.6	59.0	59.4	58.6	55.7	56.6	57.6
C = A – B = Net Profit Index for the Previous Six Months	-48.0	-49.7	-50.4	-49.4	-47.5	-42.6	-41.5	-46.5

Table 8- 8. (Excerpt from Table 8-2) Sales Index for the Previous Six Months, By Employment Size of Firm

Employment Size of Business								
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
C. = A – B = Sales Index for the Past 6 Months	-44.3	-45.2	-40.6	-39.2	-41.5	-24.5	-22.0	-34.0

Relatively speaking, larger firms did a better job of maintaining sales than they did of maintaining net profits. The net profits index for large firms is almost twice as large (-41.5) as the sales index for large firms (-22.0). The indexes for small business sales and net profits are much closer in value (-41.5 versus –47.5). This may be explained by the fact that smaller businesses may adjust costs more rapidly than larger businesses as sales levels change. Larger businesses often have more fixed overhead (space, machinery, buildings, etc.) per worker than smaller firms, and these costs cannot be adjusted as quickly in large businesses as in small

businesses.[34] Medium-sized businesses appear to be much more like large businesses with respect to changes in both sales levels and net profits.

6. Net Profit Changes by Industry for the Previous Six Months

Were changes in net profits as homogeneous in different industries as they were in different size classes. Table 8-9 shows the detailed data describing net changes in profits by industry.

Table 8-9. Percent of Firms Reporting Change in Net Profits in the Previous Six Months, by Industry

For the Last Six Months, Was the Net Profit in Your Business	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
More Than 100 % Lower	13.1	11.0	9.4	15.4	8.5	4.9	12.2	4.7	9.8	6.1	4.3	11.3	10.2
More Than 31% Lower	18.3	13.1	18.9	14.9	18.8	11.7	10.1	12.8	25.5	12.2	25.5	12.5	15.7
Between 16 and 30% Lower	16.3	14.9	14.5	15.8	19.8	21.4	15.7	13.4	5.9	14.5	14.9	13.8	16.5
Between 1 and 15% Lower	12.5	14.8	11.3	17.5	16.8	18.4	15.7	17.4	11.8	13.7	6.4	13.1	15.1
About the Same	31.3	30.8	30.2	27.2	26.0	35.9	36.2	40.9	29.4	45.8	36.2	40.0	31.3
Between 1 and 15% Higher	5.4	10.0	8.8	4.4	7.6	6.8	8.6	6.0	3.9	4.6	8.5	5.0	7.4
Between 16 and 30% Higher	2.0	3.4	5.0	3.1	1.5	1.0	1.2	4.0	11.8	3.1	----	4.4	2.6
More than 31% Higher	1.2	2.1	1.9	1.8	1.0	----	0.3	0.7	2.0	----	4.3	----	1.2
Number of Firms Reporting	504	800	159	228	1034	103	337	149	51	131	47	160	3703

The answer is difficult to conclude from the detailed data, where there seems to be considerable variance in the net profits picture across industry for each of the net profit reporting categories. Moving quickly to a net profits index makes it much easier to answer the question.

[34] Larger businesses can do better in some cost areas, however. Many larger businesses in the Western countries use automated inventory control systems that adjust inventory, and orders for replacement products rapidly as sales volume changes. Smaller businesses are rapidly eroding this advantage, however, using microcomputers to track products more efficiently.

Table 8-10. Net Profits Index for the Previous Six Months, by Industry

For the Last Six Months, Was the Net Profit in Your Business	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
A. Percent of Firms Reporting Net Profit Higher	8.5	15.4	15.7	9.2	10.1	7.7	10.1	10.8	17.6	7.7	12.7	11.1	11.2
B. Percent of Firms Reporting Net Profit Lower	60.2	53.8	54.1	63.6	63.9	56.4	53.7	48.3	53.0	46.5	51.1	49.9	57.5
C. = A – B = Net Profit Index for the Previous Six Months	-51.7	-38.4	-38.4	-54.4	-53.8	-48.7	-43.6	37.5	-35.4	-38.8	-38.4	-38.8	-46.3

The answer appears to be that there is also relatively little variance from average (-46.3). The Wholesale and Retail Trade, Transportation and Communications, and Construction industries are all below average, and Eating and Drinking Places is just above the average, while all other industries did better than the average. When an index is negative, then a smaller number is better than a larger number. The reverse is true when the basic index shows a positive number.

Both the size and the industry analysis of net profit change confirm that the profit picture was worse than the sales picture for many firms. Both analyses confirm that the economy of the Ukraine was undergoing severe downward pressure during the six-month period prior to this survey. The devaluation of the Russian ruble and the related unwanted, but probably necessary changes to the exchange value of the hrivna, appear to have been the proximate cause for the severe negative conditions reported in all industries and size groups. Smaller businesses did relatively less well than medium and large businesses with respect to sales, but performed relatively better than medium and large businesses with respect to net profits. Many more businesses of all sizes had negative results in the six-month period, and relatively few businesses in any industry reported increasing sales or net profits.

When asked why net profits changed in their businesses, business owner/managers gave the following responses.

Table 8-11. Percent Reporting Major Reasons for Change in Net Profits During the Past Six Months, by Type of Change

Major Reason for Change in Net Profit	Your Net Profits During the Last Six Months Were		
	Lower	The Same	Higher
Changes in Supply and Demand Conditions	28.8	17.4	22.0
Inflation	46.2	27.8	17.3
Change in the Volume of Sales	42.6	19.5	50.0
Change of the Average Sales Prices of Products	16.5	13.1	26.7
Change of Prices for Raw Materials & Inputs	24.9	17.5	14.9
Change of Labor Cost	1.8	2.3	3.0
Change of Regulatory Environment (Inspections, Regulated Prices, Administrative Interference)	6.3	5.3	4.0
Level of Taxation	36.1	24.8	5.9
Changes in Expenses (Rental, Depreciation)	12.7	9.5	8.4
Usual Seasonal Changes	15.4	12.8	28.5
Other	13.7	17.0	14.9
Total Number of Firms Reporting	2129	1118	404
Average Number of Reasons Cited as Important	2.5	1.9	2.2

Five reasons were cited most frequently by those businesses with lower net profits during the prior six months. Inflation was the most frequently cited reason, followed by a decrease in the absolute volume of sales. The decline in sales was tied to changes in supply and demand conditions, and to changes in the prices of raw materials and inputs. Both of these conditions were noted earlier in the report as probably being caused by the depreciation of the ruble and the hrivna. The last major factor cited was the level of taxation.

For those firms with increased profits, the level of taxation had almost no impact. Rising sales volumes were most frequently cited as the reason for increased profits. Sales volumes were related to inflation, changes in seasonal demand patterns, and changes in the average sales prices of products. Labor costs, and rental payments were not cited frequently by firms gaining or losing net profit. Changes in the regulatory environment also appeared to have little impact on profits, either positive or negative. For the most part, those firms with increasing or decreasing profits focused on demand issues rather than supply issues. It is interesting to note that 1988 firms reported lower sales, while 2129 reported lower profits. Conversely, 667 firms reported higher sales for the six-month period, while only 404 firms experienced rising net profit.

7. Price Changes During the Prior Six Months

Prices of goods and services did not decline like sales and net profits declined. When asked how their selling prices were at the end of the six-month period as compared to six months earlier, owner/managers reported that prices had changed as shown in Table 8-12.

Table 8-12. Percent Reporting Current Selling Prices Compared to Prices Six Months Earlier, by Industry

How Are Your Average Selling Prices Today, Compared to Six Months Ago?	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
A. Percent of Firms Reporting Higher Prices	34.0	40.0	42.9	29.9	55.6	48.2	36.0	36.8	22.4	30.1	36.8	37.0	42.0
B. Percent of Firms Reporting Lower Prices	15.7	13.7	11.2	17.8	14.0	7.9	9.5	8.6	25.8	14.0	12.3	16.1	12.9
C. = A - B = Price Index for Current Prices	18.3	26.3	31.7	12.1	41.6	40.3	26.5	28.2	-3.4	16.1	24.5	20.9	29.1

For the first time in this section, the Index generated from owner/manager responses is positive. For the economy as a whole, 29.1 percent more firms said that prices increased rather than decreased. Firms in the Wholesale and Retail Trade Industry, which had reported the most negative sales index and the next-to-most negative net profit index, now show the highest positive price index. There appears to be an anomaly here, but this can be explained by looking at the degree to which prices and sales changed. More firms in the Retail and Wholesale Trade industry reported declining sales than reported increasing prices. For many firms with higher prices, the price increases were not as large as the decline in the volume of sales. This also appears to be true for most other industries.[35] More firms saw increasing prices over the reporting period, but declining sales and net profits.

B. EXPECTED FUTURE SALES (REVENUE) AND THE EXPECTED FUTURE VOLUME OF SALES

Business owner/managers were asked to predict changes in sales revenue for the next six months. Their projections organized by size of firm are shown in Table 8-13.

[35] In the interest of brevity, the detailed price change data underlying Table 8-12 are not presented here.

Table 8-13. Percent of Respondents Predicting the Expected Change in Their Sales During the Next Six Months, by Size of Business

During the Next Six Months, My Sales Will	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Go Down Substantially	10.7	11.8	11.0	11.5	11.3	8.2	5.9	9.6
Go Down Slightly	13.2	16.0	21.4	21.1	18.5	18.5	18.5	18.5
Will Remain About the Same	52.0	46.9	40.2	39.8	43.8	34.3	37.8	40.5
Will Increase a Little	20.8	20.2	22.3	24.0	22.2	32.2	31.2	2.9
Will Increase Substantially	3.3	5.1	5.1	3.6	4.2	6.8	6.5	5.2
Number of firms Responding	394	475	435	800	2104	794	706	3604

Smaller businesses report about the same expectations as medium-sized and large businesses with respect to expected sales staying about the same or declining slightly. The smaller business owners are much more likely to expect sales to go down substantially, however. The strongest differences in outlook, however, deal with expectations for growth, where small businesses are much less positive minded than there medium-sized and large competitors. Almost 35 percent of medium-sized businesses expect that sales will increase. Thirty-seven percent of larger businesses say the same. But only 26.4 percent of small businesses see a growth in sales revenue in the next six months.

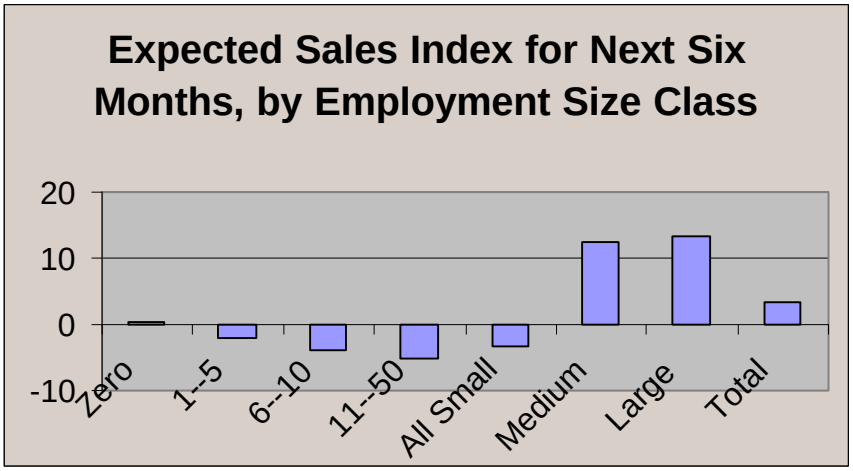
The differences between small and large firms can be shown more clearly with an expected sales index. Table 8-14 simplifies the data in Table 8-13 by adding up respondents with positive expectations, adding up respondents with negative expectations, and subtracting the two. Owners or managers who expect no change are ignored.

Table 8-14. Sales Index for Firms Reporting Expected Change In Sales During the Next Six Months, by Size of Business

During the Next Six Months, My Sales Will	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
A. Percent of Firms Reporting an Increase in Expected Sales	24.1	25.7	27.4	27.6	26.4	39.0	37.7	31.4
B. Percent of firms Reporting a Decrease in Expected Sales	23.9	27.8	31.4	32.6	29.8	26.7	24.4	28.1
C. = A – B = Expected Sales Index for the Next Six Months	0.2	-2.1	-4.0	-5.0	-3.4	12.3	13.3	3.3

The index of expected sales changes is clearly a mixed index. Expectations for the whole economy are slightly positive (3.3 on the index), but the expectations of smaller business owners are slightly negative. These negative expectations are more than made up by the positive expectations of medium-sized and larger firms.

Figure 8-3: Expected Sales Index for Next Six Months, by Emploment Size Class



Business expectations by industry are shown in Table 8-15.

Table 8-15. Percent of Firms Predicting the Expected Change in Their Sales During the Next Six Month, By Industry

During the Next Six Months, My Sales Will	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
Go Down Substantially	11.7	5.8	8.4	10.4	12.8	14.3	7.9	7.0	----	7.8	12.2	7.2	9.5
Go Down Slightly	17.2	16.6	11.7	16.2	23.8	20.0	13.7	23.1	19.3	17.2	12.2	18.1	18.5
Remain About the Same	35.9	37.3	40.8	41.0	38.2	33.3	52.6	49.7	49.1	39.1	57.1	48.8	40.6
Will Increase a Little	30.0	33.0	27.9	29.3	21.7	26.7	20.7	16.8	26.3	31.3	16.3	22.3	26.2
Will Increase Substantially	5.2	7.3	11.2	3.2	3.6	5.7	5.2	3.5	5.3	4.7	2.0	3.6	5.2
Total Number of Firms Reporting	460	791	179	222	988	105	329	143	57	128	49	166	3617

There is more variance by industry than by firm size. Wholesale and Retail Trade has more firms with negative expectations and fewer with positive outlooks. More firms in the Domestic Services and Other Business Services expect sales to remain about the same. Looking across industries it is difficult to see consistent patterns due to industry variance in the relative numbers of businesses predicting a "little" change compared to "substantial" change. An expected change index makes the data more manageable as shown in Table 8-16 below..

Table 8-16. Sales Index for Firms Predicting the Expected Change in Their Sales During the Next Six Month, By Industry

During the Next Six Months, My Sales Will	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
A. Percent of Firms Reporting an Increase In Expected Sales	35.2	40.3	39.1	32.5	25.3	32.4	25.9	20.3	31.6	36.0	18.3	25.9	31.4
B. Percent of Firms Reporting A Decrease In Expected Sales	28.9	24.4	18.1	26.6	36.6	34.3	21.6	30.1	19.3	25.0	24.4	25.3	28.0
C. = A – B = Expected Sales Index for the Next Six Months	6.3	15.9	21.0	5.9	-11.3	-1.9	4.3	-9.8	12.3	11.0	6.1	0.6	3.4

Industry change expectations become clearer immediately. Two industries, Wholesale and Retail Trade, and Social and Cultural services exhibit relatively negative expectations. The Eating and Drinking Places industry also has slightly negative expectations. Most other industries are slightly positive in outlook, but Manufacturing and Mining, and Agriculture and Forestry look for a significantly greater number of firms to exhibit higher sales rather than lower sales. Finance, Insurance, and Real Estate, and Consulting Services also look for higher growth., but the outlook in these industries is not as positive as Manufacturing and Mining or Agriculture and Forestry.

On net, as shown in both the size indexes and the industry indexes, the outlook is slightly positive. This is a relative improvement, given the negative growth in sales and net profits experienced by most firms in the six months prior to the survey.

When asked about the reasons for projecting sales in the near future, those firms that expected sales increases identified seasonal changes, changes in sales prospects for their products and services rather, and changes in economic conditions. Firms expecting lower sales or slower growth in sales looked to changes in inflation, changes in economic conditions, and seasonal changes to explain why their sales would be lower. While both groups identified seasonal changes, many more firms with negative expectations looked to inflation as a proximate cause. The owner/managers with a positive outlook did not think that inflation was a significant issue. Those firms expecting lower sales were also about twice as likely to cite changes in the political climate as a reason for negative change. See Table 8-17.

Table 8-17. Percent Reporting Major Reasons for Expected Change in Their Sales During the Next Six Months, by Type of Change

Major Reason for Change in Sales	Your Sales During the Next Six Months Will Be		Total
	Lower	Higher	
Change in Inflation	40.5	7.5	23.1
Changes in Economic Conditions	43.7	23.1	32.9
Changes in Sales Prospects for my Products	26.5	36.8	32.0
Change in Interest Rates and Credit Availability	3.4	2.6	3.0
Changes in Average Sales Prices	14.9	13.3	14.1
Change of Prices for Raw Materials and Inputs	16.1	9.4	12.5
Change of Regulatory Environment (Inspections, Regulated Prices, Administrative Interference)	6.8	4.8	5.7
Changes in the Political Environment	11.8	5.7	8.6
Usual Seasonal Changes	20.4	51.9	37.0
Other	26.7	15.9	21.0
Total Number of Firms Responding	947	1033	1980
Average Number of Reasons Cited as Important	2.2	1.8	2.0

1. Expected Changes in the Volume of Sales

Business owners and managers were asked to predict what would happen to the volume of sales in the next six months. Volume refers to real changes, i.e., to the expected change in the number of physical units sold during the six months following the survey. Table 8-18 shows the predicted change in volume of sales by industry. The bottom three lines of the Table show the derivation of and the value of the expected volume index for each industry and for the economy as a whole.

Table 8-18. Percent of Firms Reporting Expected Change in the Volume of Production in the Next Six Months, by Industry

During the Next Six Months the Volume of Production Will:	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
Decrease Significantly	10.5	7.5	5.7	9.4	9.4	13.3	4.8	5.8	1.6	6.0	5.7	9.8	8.2
Decrease Somewhat	21.1	15.2	11.5	21.4	23.3	22.9	17.1	20.5	21.3	18.8	18.9	20.9	19.5
Stay About the Same	34.2	37.0	33.3	39.7	39.5	31.4	48.5	50.0	39.3	43.6	49.1	42.9	39.5
Increase Somewhat	30.6	34.0	37.9	27.4	25.0	31.4	25.7	19.9	31.1	25.6	26.4	23.9	28.6
Increase Significantly	3.6	6.3	11.5	2.1	2.7	1.0	3.9	3.8	6.6	6.0	----	2.5	4.2
Number of Firms Reporting	474	789	174	234	964	105	334	156	61	133	53	163	3640
A. Percent of Firms Reporting An Increase in Expected Volume	34.2	40.3	49.4	29.5	27.7	32.4	29.6	23.7	37.7	31.6	26.4	26.4	32.8
B. Percent of Firm Reporting A Decrease in Expected Volume	31.6	22.7	17.2	30.8	32.7	36.2	21.9	26.3	22.9	24.8	24.6	30.7	27.7
C. = A – B = Expected Volume Index for the Next Six Months	2.6	17.6	32.2	-1.3	-5.0	-3.8	7.7	-2.6	14.8	6.8	1.8	-4.3	5.1

Moving directly to the bottom line of Table 8-18, the expected volume index shows more variance than any of the other, similar indexes developed in this section of the report. The volume index for Agriculture and Forestry, for example, shows a positive reading of 32.2, while the Wholesale and Retail Trade industry index drops to a –5. The remainder of the split fairly evenly, four industries predicting more net decreases in volume and fewer increases, and six other industries predicting net improvements ranging from a strong 17.6 level in Manufacturing and Mining to a plus 1.8 in Other Business Services. Before analyzing this index further, the survey provides one other projection that may provide some additional insight into the future. The survey instrument asked business owners to look outside of their own businesses in order to estimate changes in general business conditions. The results are shown in Table 8-19.

Table 8-19. Percent of Firms Estimating Change in General Business Conditions During the Next Six Months

Will General Business Conditions	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Be Much Better	1.1	0.6	0.9	0.8	0.8	1.8	1.4	1.2
Be Somewhat Better	11.3	10.2	9.1	8.5	9.6	8.9	14.9	10.4
Be About the Same	49.7	41.6	44.0	39.6	42.9	41.2	36.9	41.4
Be Somewhat Worse	25.9	31.9	28.9	35.4	31.4	33.3	34.1	32.3
Be Much Worse	12.0	15.7	17.2	15.7	15.3	14.8	12.7	14.7
Number of Firms Reporting	441	527	464	854	2286	811	707	3804

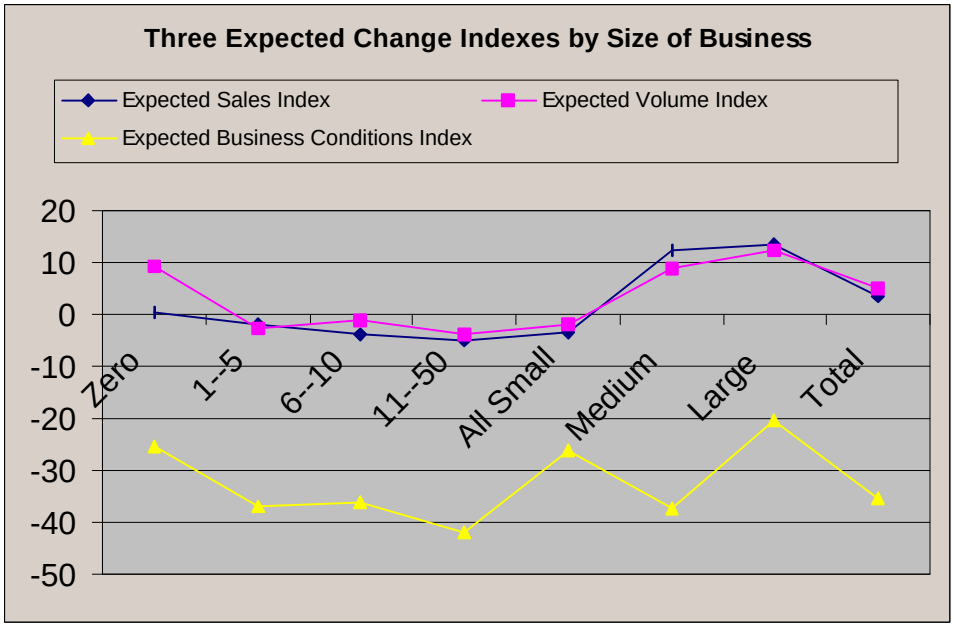
Very few firms believe that general business conditions will be much better in the six months following the survey than they have been in the past six months. Large firms are more likely to expect some improvement in the general outlook. The majority of the firms are divided rather evenly between expecting general business activity to stay the same and expecting general business conditions to deteriorate. To develop some more insight from these numbers, Table 8-20 shows an expected business conditions index derived from Table 8-19, and compares the expected general business conditions index with the index derived earlier for expected changes in sales revenue (Table 8-16) and with an index for expected changes in sales volume.

Table 8-20. Expected Sales Index, Expected Volume of Sales Index and Expected General Business Conditions Index for Next Six Months, by Employment Size of Business

Will General Business Conditions	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
C. = A – B = Expected Sales Index	0.2	-2.1	-4.0	-5.0	-3.4	12.3	13.3	3.3
C = A – B = Expected Volume of Sales Index	9.2	-2.8	-1.0	-3.9	-2.0	9.0	12.5	4.9
C. = A – B = Expected Business Conditions Index	-25.5	-36.8	-36.1	-41.8	-26.3	-37.4	-20.5	-35.4

The expected sales and expected volume of sales indexes look very much the same. More very small firms (zero employee) expect volume to rise but the number expecting prices to increase is smaller. The expected business conditions index is very different from the two sales-related indexes, with the overall feeling much more negative in all size classes. How can one explain the different outlook for general business conditions? The answer appears to be that entrepreneurs generally assume that their businesses will do better than business in general. This type of projection is similar to projections in the United States and in Western Europe. It is an indication, perhaps that entrepreneurs as a group tend to be optimists. This optimism may be one explanation of why entrepreneurs are willing to take some risks when starting or expanding a business.

Figure 8-4: Three Expected Change Indexes by Size of Business



2. Conclusion to Section 8

This section has explored the recent past and the near-term future by asking business owners and managers to share their experience and their predictions. The extensive data tables embodying their thoughts are then simplified through the construction of simple indexes that make it easier to draw conclusions from the information in the tables. Why are these tables and indexes useful. The simple answer is that they provide a mechanism for the government to measure current business activity and expected future business activity using a small sample of businesses. Business activity can be measured in terms of sales revenues, sales volume (number of physical units), prices, net profits, etc. Similar questions can be asked about employment levels and expectations for hiring, about inventory levels and expected inventory change, about investment spending and expected investment spending, and about numerous other business variables. Over time, the State may introduce more precise measures of the experiential variables, i.e., the variables dealing with the recent past. In the United States an important small business organization, the National Federation of Independent Business conducts a quarterly survey of

many of these variables. The survey is restricted to small and medium-sized enterprises only, since the U. S. government produces good information for the large business sector of the economy. The data is published quarterly and is used by both businesses and policy analysts interested in near-term (past and future) business behavior. In Poland, the Ministry of the Economy uses a similar report to generate current information about both small and large business behavior.[36]

It is important for the government or for the business community to have an accurate perception of what is happening or expected to happen in the economy. Without this information it is more difficult to analyze business problems and prepare reasonable policy solutions. Business in the Ukraine would benefit from the introduction of a regular survey to measure business activity along the lines initiated in this survey.

[36] The U. S government statistical agencies are prohibited by Presidential Executive Order from introducing any new surveys on a quarterly basis. Since no survey initiated prior to the Executive Order covered small and medium-sized enterprises in sufficient detail, no survey can be initiated to provide this detail. The National Federation of Independent Businesses is filling a quasi-public function, therefore, in collecting and publishing the data on private basis.

IX. BUSINESS EXPERIENCE WITH FINANCE AND CREDIT

1. General Questions on Finance and Credit

Three questions were asked of all respondents regarding the availability of finance and credit for their businesses.[37] The first question asked the respondent if they thought loans, at the time of the survey, were harder or easier to get than at an earlier time. The second and third questions asked the owner/manager whether they had applied for a loan recently, and whether or not the loan was granted. The response to the general question about loan availability is shown in Table 9-1

Table 9-1. Percent of Firms Reporting Whether Loans are Harder or Easier to Get Now Compared to Six Months Ago, by Industry

Are Loans Easier or Harder to Get Now Compared to Six Months Ago?	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
They were Not Available Then and They Are Not Available Now	64.8	53.3	61.0	61.9	47.1	56.3	65.4	69.7	37.5	65.2	60.0	64.2	56.4
It is Harder to Get Loans Now	13.7	17.2	13.3	12.5	20.3	23.9	10.0	14.1	10.0	4.3	23.3	15.1	16.0
It is About the Same Now as it Was Six Months Ago	18.2	24.3	20.0	23.1	26.3	18.3	21.6	14.1	42.5	27.2	16.7	17.0	23.0
It is Easier to Get Loans Now	3.3	5.3	5.7	2.5	6.3	1.4	3.0	2.0	10.0	3.3	----	3.8	4.6
Number of Firms Reporting	335	647	105	160	700	71	231	99	40	92	30	106	2616

[37] Two earlier finance questions were discussed in SECTION Four of the report. The first question asked if the respondent had ever completed a formal request for credit. The second asked if the respondent had ever received help from an outside consultant in filling out such a request.

It is not necessary to prepare a loan availability index to read this table of responses. Fewer than five percent of firms indicated that it was easier to get loans at the time of the survey, compared to six months earlier. Almost three-fourths of the respondents said that loans were not available either earlier or now (56.4 percent), or harder to get now (16 percent). Twenty-three percent thought that loan availability now was about the same as it was six months earlier. As with many other subjects, the response to this question is almost overwhelmingly negative. It is hard to imagine a situation where business expectations can be more negative. Perhaps this negativity is directly related to the recent devaluation of the ruble and the hrivna following the financial crisis in Russia. The fact that business conditions in the Ukraine have been declining for almost ten years now may also contribute to the general negativity. Negativity, *per se*, is not the problem. Negativity reinforces poor business performance, however, as businesses refrain from building inventories, improving plant and equipment, or making other capital purchases that would stimulate the economy. Businesses also put little pressure on the banking system or on other business lenders to improve the credit markets in the Ukraine. Businesses with potential fast growth,[38] by definition must have access to credit markets in order to continue growing at a rapid rate. Rapid growth does not appear to be a common phenomenon in the Ukraine.

2. Did You Apply for a Loan, Were You Successful?

Only a small portion of firms applied for a loan during the last six months. A reasonable proportion of firms that applied was successful. This data is shown in

Table 9-2. Percent of Firms Reporting That They Had Attempted to Borrow Money Within the Last Six Months, by Industry

Did You Attempt to Borrow Money for Your Business?	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
A. Yes	16.2	29.6	12.0	21.9	22.4	15.7	13.4	10.0	9.0	14.1	10.9	13.5	19.8
B. Number of Firms Reporting	91	267	26	59	271	20	55	21	7	22	7	30	876
C. No	83.8	70.4	88.0	78.1	77.6	84.3	86.6	90.0	91.0	85.9	89.1	86.5	80.2

[38] Fast growth is defined simply as a growth rate that cannot be financed through retained earnings (profits). If fast growing firms are to continue to grow rapidly, they must have access to credit. In the United States, about 65 percent of firms finance their growth and development through retained earnings. At any one time, about 10 percent of U. S. firms are growing so rapidly that they must use loans (or the sale of stock) to finance at least a portion of their growth.

D. Number of Firms Reporting	470	634	191	211	941	107	356	190	71	134	57	193	3255
E. If Yes, was Your Enterprise Successful?	41.8	43.4	23.1	7.3	49.6	35.0	21.6	35.0	57.1	13.6	14.3	40.0	41.4
F. Number of Firms Reporting	38	116	6	22	134	7	12	7	4	3	1	12	362
B + D =	561	901	217	270	1212	127	411	211	78	156	64	223	4431
H. F/G(100) = Percent of All Firms Successfully Borrowing	6.8	12.9	2.8	8.1	11.1	5.5	2.9	3.3	5.1	1.9	1.6	5.4	8.2

The first finding from the Table is that only 876 firms (out of 4131 firms responding) asked for a loan. Of the group of firms asking for loans, only 362 or 41.4 percent of those requesting loans were successful in obtaining them. Column H. shows the overall success rate: 8.2 percent of responding firms got loans during the last six months. The great bulk of loan requests come from the Manufacturing and Mining industry and from the Wholesale and Retail Trade industry. Manufacturing and Mining had the highest application rate (29.6 percent), and a slightly above average success rate (43.4 percent), producing the highest percent of firms borrowing successfully in any industry (12.9 percent). Wholesale and Retail Trade had a lower application rate (22.4 percent of firms applied for a loan), a higher success rate (49.6 percent of respondents were successful in obtaining a loan) producing an 11.1 percent share of firms in the industry with loans. No other industry had a loan penetration rate above the national average rate of 8.2 percent. The loan questions were asked in a general form, i.e., the question did not specify a bank loan, a loan from a supplier, or any specific form of loan. It may be that a greater share of loans in Manufacturing and Mining were formal bank loans, while more loans in the Wholesale and Retail Trade industry were of a less formal nature. Two questions were asked about the use of trade credit and the terms on which trade credit was supplied.[39] When asked if suppliers extended trade credit, the respondent answered as shown in Table 9-3.

[39] Trade credit is the provision of credit to a retailer by a wholesaler or producer. In the United States, trade credit is usually extended by large suppliers to smaller retail firms. The amount of trade credit outstanding in the United States is larger than the volume of bank loans to smaller businesses. In recent years more than $400 billion of trade credit has been outstanding.

Figure 9-1: Percent of Firms Applying for Loans, Percent Successful, Percent Receiving Loans, by Industry

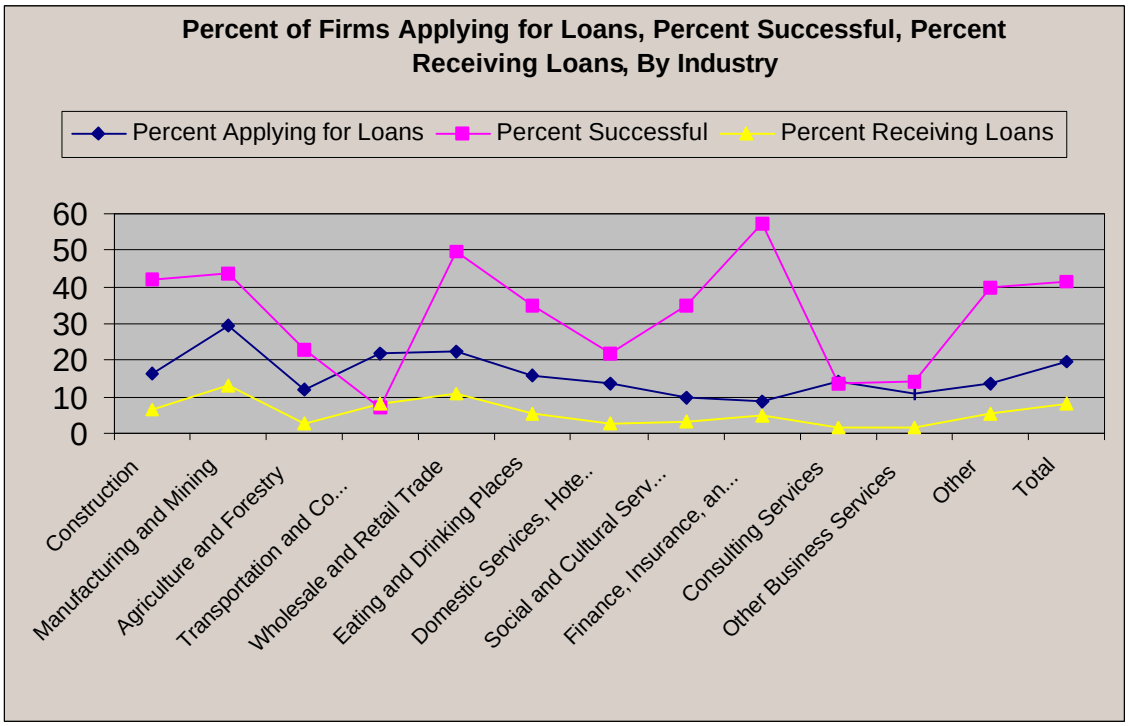
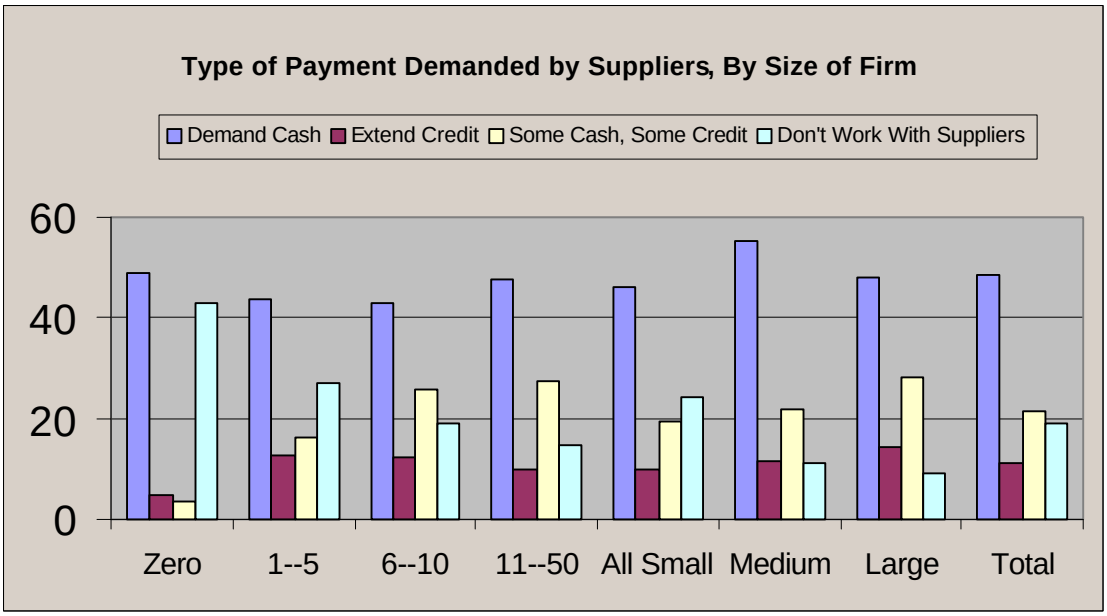


Table 9-3. Percent of Firms Reporting Whether Suppliers Demand Cash or Extend Credit, by Size of Business

Do Your Suppliers	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Demand Cash Payment	48.7	43.8	42.9	47.7	46.1	55.4	48.2	48.4
Extend Credit	4.8	12.7	12.3	10.1	10.0	11.5	14.3	11.1
Some Require Cash, Some Extend Credit	3.6	16.4	25.9	27.5	19.5	22.0	28.2	21.6
We Don't Work With Suppliers	42.9	27.1	19.0	14.6	24.4	11.1	9.3	18.9
Number of Firms Reporting	581	621	522	966	2690	919	788	4397

The responses in Table 9-3 indicate that the economy of the Ukraine is still a cash economy, with almost half of the firms responding to the survey reporting that they must provide cash payment to suppliers (48.4 percent). Another 18.9 percent of firms indicate that they don't purchase from suppliers. Less than a third of the 4397 respondents to this question indicated that they obtained all supplies on credit (11.1 percent) or part of their supplies on credit. The number of suppliers providing credit is encouraging, however, given that only 8.2 percent of firms indicated that they had received a loan in the last six months. Trade credit loans are usually very short term, and they allow a firm to build up a good credit reputation quickly, if the trade credit loans are paid off on a timely basis. The terms of trade credit and the percent of firms using different terms are shown in Table 9-4. The loan terms used in the Ukraine are remarkably similar to trade credit terms in the United States. In one respect, the trade credit terms are even more liberal than in the United States, since more than a quarter of firms reporting indicated that they were given items on consignment.[40] Few American suppliers are so generous. The lack of demand for products noted in Section Eight as a probable cause for declining sales over the past six months may have encouraged more suppliers to use consignment as a way of getting better distribution for their products.

Figure 9-2: Type of Payment Demanded by Suppliers, By Size of Firm



[40] Consignment means that no payments are due until the merchandise provided by the supplier has been sold.

Table 9-4. Percent of Firms Reporting Terms of Credit From Suppliers Providing Credit, by Size of Business

If Your Suppliers Provide Credit, What Terms do They Use	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Providing Goods on Consignment Until Sold	45.6	36.0	27.6	24.7	29.4	21.8	20.6	25.7
Providing Goods With No Payment Due for 30 Days	31.6	49.2	60.1	58.9	55.1	48.2	51.4	52.7
Providing Goods With No Payment Due for 31-60 Days or 61-90 Days	8.8	14.3	16.3	13.8	14.2	25.7	22.3	18.6
Providing a Discount (Lower Price) for Payment Within 10 Days, But Allowing 30 Days for Payment	3.5	8.5	8.4	9.5	8.6	7.3	4.2	7.3
Number of Firms Not Sure of Payment Terms	12	18	17	41	88	52	57	197
Number of Firms Reporting	57	189	203	377	826	330	354	1510

The other forms of trade credit, no payment due for thirty days, sixty days, or ninety days are widely used in most Western countries, although 90-day credit is relatively rare. One of the more popular forms in the United States is the method which provides a discount to the retailer, if payment is made within ten days. This form of trade credit was reported by 7.3 percent of the Ukrainian firms that indicated that they had some retail activity. In the United States this form of trade credit is called "two-ten, net thirty," meaning that a two percent discount is given if the supply invoice is paid within ten days.[41] If the invoice is not paid in ten days, then the full price is due in 30 days. The discount mechanism provides a real incentive for businesses to pay on a timely basis. The use of trade credit is likely to expand rapidly as suppliers and retailers gain more experience in the use of credit mechanisms.

[41] In a period of rapid and unpredictable inflation, the effective discount for earlier payment will be larger than the two percent quoted in the terms.

X. BUSINESS INVESTMENT

A. INVESTMENT DURING THE PAST YEAR

Business investment is a critical element in the growth of the economy in the Ukraine. The relatively poor performance of the Ukrainian economy over the past 10 years has contributed to a poor investment climate in the Ukraine. The poor investment outlook has contributed in turn to the slow or negative growth of the economy over the last ten years. As a consequence, much of the capital stock of the Ukraine has deteriorated during this period. The lack of incentive to invest because of poor economic conditions may be only part of the investment problem. With almost all firms (private and State-owned) trying to minimize taxes by underreporting sales and employment, many firms will be cautious about making investments that might signal the tax authorities that sufficient profits are being made to finance new investment. Investment expenditures will be biased, therefore, towards replacement investment, inventory buildup (assuming the size of inventories can be at least partially hidden) or investments that can be concealed from the tax authorities. Investment may also be discouraged because of the excessive costs needed to obtain "informal" approval for projects, or to keep "inspectors" from slowing the completion of investment projects. The proportion of firms investing in the Ukraine during the year prior to the survey is shown in Table 10-1.

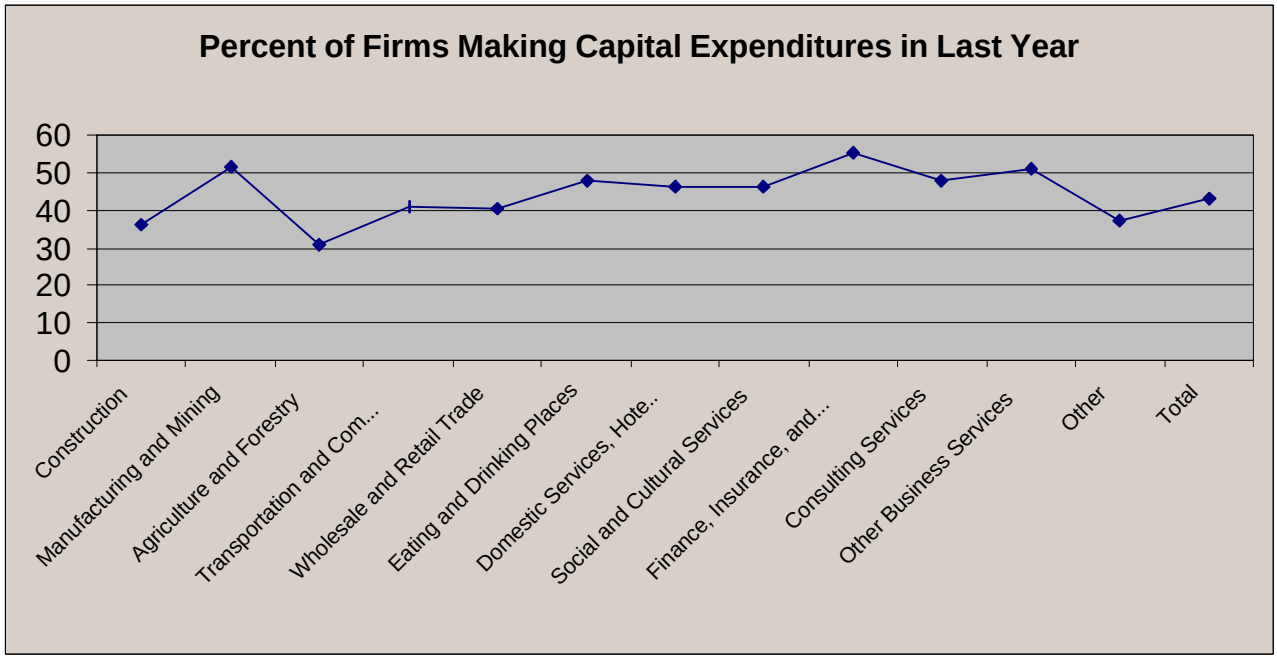
Table 10-1. Percent of Firms Reporting Investment Expenditures During the Past Year, by Industry

Has Your Firm Made Any Capital Expenditures in the Past Year?	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
Yes	35.9	51.5	30.6	40.9	40.5	48.0	46.1	46.2	55.0	47.7	50.8	37.4	43.2
No	64.1	48.5	69.4	59.1	59.5	52.0	53.9	53.8	45.0	52.3	49.2	62.6	56.8
Number of Firms Reporting	566	905	216	274	1226	127	412	210	80	156	63	219	4453

Despite the relatively poor incentive to invest, 43.2 percent (1923 firms) of the firms interviewed (4453 firms) reported that they had made some investments during the past year. The proportion of investing firms was highest in the Finance, Insurance and Real Estate industry and in the Manufacturing and Mining industry. A relatively high proportion of firms in the Eating and Drinking Places industry also reported making some investments. The Agriculture and Forestry industry stands out as the industry with the smallest proportion of firms investing. The

proportion of firms reporting investments during the past year is lower than the proportions reported in economies that are in positive growth, high employment environments. In such

Figure 10-1: Percent of Firms Making Capital Expenditures in Last Year



environments, almost all firms report making some investments. The tax policy affecting investment expenditures also may have a significant effect on both the proportion of firms investing and the amount of investment. The United States, for example, has a tax policy which says that the first $25,000 of investment in new machinery or equipment (100,000 hrivnas) by any company may be expensed (written off) in the year of purchase, rather than being depreciated over a five or 10 year period. Given an average business income or profit tax rate of 35 percent, this is equivalent to a government subsidy of about 30% for purchase of the investment goods. For large firms, the $25,000 amount may be a very small proportion of their total investment expenditures. For smaller firms the $25,000 provision is a strong incentive to purchase new equipment or machinery each year. In other countries, there may be targeted investment tax credits which provide a tax incentive for certain kinds of investment. These incentives are similar to the U. S. model, but may be restricted to certain types of investments.

The United States provides another mechanism for increasing the incentive to invest by providing for a lower profit (net income) tax rate for the first $100,000. This rate applies to all firms. For a large firm, the lower tax rate on the first $100,000 of net income doesn't mean much; for smaller firms the effect is much more important. Since most firms finance expansion

or increases in productivity through retained earnings, the lower tax level increases capital available for reinvestment in the business.[42]

The pattern of investment purchases reported in the Ukraine, by size of firm, is shown in Table 10-2

Table 10-2. Percent of Firms Reporting Investments Through Purchases of Goods During the Past Six Months, By Employment Size of Firm and Type of Goods Purchased

Type of Good Purchased	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Production Premises and Structures	11.1	14.7	11.7	20.8	16.9	22.5	19.3	18.9
Vehicles	13.3	13.3	11.2	13.9	13.1	26.9	31.1	21.0
Equipment	48.9	53.8	59.2	58.6	57.5	60.7	66.3	60.4
Fixtures, Furniture	17.8	12.6	19.3	19.7	18.3	18.3	11.6	16.6
Land	2.2	4.9	5.4	4.5	4.7	4.4	2.1	4.0
Improvements to Existing Buildings	17.8	45.5	46.2	48.8	45.9	54.6	49.8	49.0
Number of Firms Reporting it is Hard to Say or They Don't Know if Investment was Made	4	3	5	3	15	3	5	23
Number of Firms Reporting	45	143	223	447	858	427	424	1709

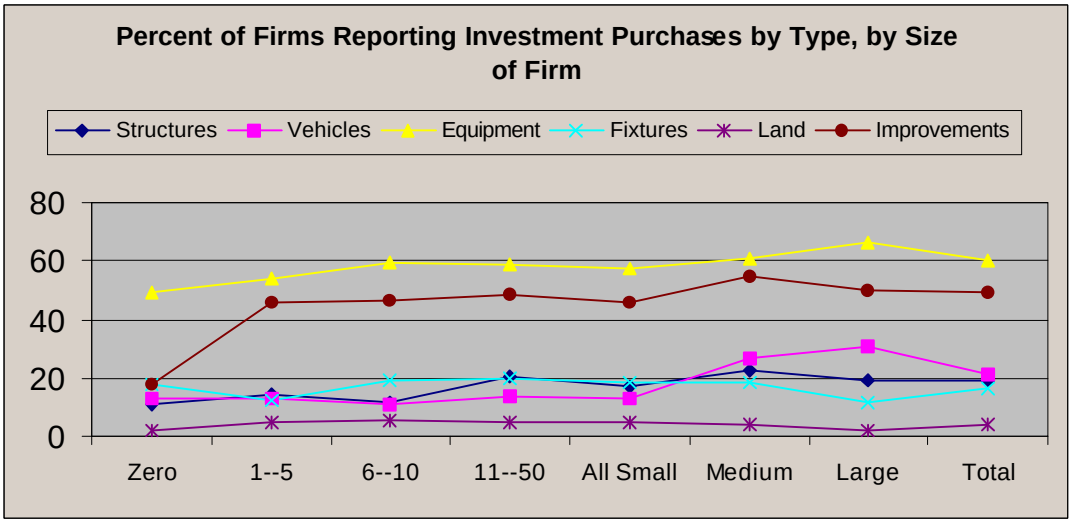
Only 1,709 firms of the 1,923 firms reporting that they made investments were willing or able to share the type of investment with the interviewer. Twenty-three firm managers said some investments may have been made but they were not positive about this. Approximately 200 managers refused to answer this question. Their refusal may have been related to the reluctance

[42] The lower tax rate on the first tranch of business net income provides a tax rate similar to the personal income tax rate on the first tranch of personal earnings. This preserves the rough equity between personal taxes and business taxes, which means that business has no bias towards use of either capital or labor. Businesses, therefore, can evaluate proposed investments from the standpoint of the net effect on the capacity or productivity of the business, and ignore tax-related biases.

associated with releasing information that might get to the tax authorities, despite a clear promise from the survey manager that no information would be released to the tax authorities.

Equipment expenditures were the most common types of investment purchases, followed by improvements to existing buildings. Vehicles were the third most popular category of investment, followed closely by purchase of production premises and structures. Very few firms of any size reported making purchases of land. Smaller firms generally had slightly lower rates of investment, with the exception of vehicle purchases where the proportion of small firms buying vehicles was much smaller than the proportion of medium and large-sized firms buying cars. Medium-sized and large firms were slightly more likely to purchase investment goods of some sort than small firms.

Figure 10-2: Percent of Firms Reporting Investment Purchases by Type, by Size of Firm



One interesting question that was not asked in the survey was how these investment goods purchases were financed. If only 8.2 percent of firms reported receiving loans in the six months prior to the survey, then most investments were not financed through business loans. The most probable answer is that much of this investment is being financed out of retained earnings. This pattern of firm growth being financed through retained earnings after taxes is typical of the Western countries. This is an important reason for the government to consider a tax policy that does not take all or even most of business earnings as tax payments. Lower marginal and average tax rates leave funds in the hands of business owners. These funds are generally invested in the business as long as there are prospects for sales growth.

1. Investment Expenditures by Industry

The pattern of expenditures is somewhat predictable. Firms in the Transportation industry, for example, are most likely to have bought a vehicle in the past year. Firms in the Construction and

Manufacturing and Mining industries were most likely to have purchased equipment.[43] (Table 10-3)

Table 10-3. Percent of Firms Reporting Investments Through Purchases of Goods During the Past Six Months, By Industry and Type of Goods Purchased

Type of Good Purchased	Principle Sphere of Activity (Industry)												
	Construction	Manufacturing, Mining	Agriculture and Forestry	Transportation, Communication	Wholesale and Retail Trade	Eating and Drinking Places	Domestic Services, Hotels, Recreation	Social and Cultural Services	Finance, Insurance, and Real Estate	Consulting Services	Other Business Services	Other	Total
Production Premises and Structures	17.3	20.0	26.3	11.4	21.8	18.6	13.7	25.3	28.6	4.8	7.4	19.7	18.9
Vehicles	29.7	18.7	29.8	41.9	19.1	5.1	12.5	15.4	38.1	11.1	18.5	21.1	20.8
Equipment	70.8	70.6	49.1	37.1	52.2	59.3	50.6	61.5	57.1	69.8	77.8	69.0	60.3
Fixtures, Furniture	14.1	8.9	7.0	7.6	20.6	27.1	22.6	34.1	40.5	15.9	22.2	9.9	16.7
Land	14.5	15.9	----	1.4	42.0	7.2	10.1	4.3	1.4	1.4	----	1.4	4.0
Improvements to Existing Buildings	40.0	48.3	45.6	44.8	54.9	55.9	56.5	54.9	38.1	36.5	37.0	40.8	48.9
Number of Firms Reporting it is Hard to Say or They Don't Know if Investment was Made	2	6	----	----	8	1	1	2	1	2	----	----	23
Number of Firms Reporting	185	439	57	105	408	59	168	91	42	63	27	71	1715

[43] Firms in the Other Business Services industry showed the highest proportion of firms buying equipment. There were only 27 firms reporting in this industry, however, so that the sample percentages reported in the table for this industry will have an associated margin of error which is relatively large. Another way of saying this is that we can't be certain that the percentage of firms reporting equipment expenditures in the total population of business services firms is close to the percentage reported here for the sample.

One possible surprise here is the relatively large proportion of firms in the Wholesale and Retail Trade industry that report purchasing land. The 42 percent that report purchasing land is much higher than the percentage reported for any other industry. The number of firms reporting in the Wholesale and Retail trade industry is 408, a large enough sample that we can be reasonably certain that this number is representative of all firms in this industry. Indeed, relative to other industries, the wholesale and retail trade industry appears to have the most significant overall pattern of investment. This is important to note, because Retail Trade may be one of the fastest growing industries in the country.

2. Investment Leasing

Firms purchase many of the investment goods that they need. Another way of obtaining investment goods is to lease them. This is equivalent to purchasing a good on credit, if the title to the good passes to the company at the end of the lease, or renting a good, if the title stays with the firm providing the lease. Properly used, leasing can be a good way of minimizing the capital that a firm has to invest in the business. The firm can choose to rent some goods and purchase others. Tables 10-4 and 10-5 show investment leasing patterns, first by size and then by industry.

Table 10-4. Percent of Firms Reporting Investments Through Lease of Goods During the Past Six Months, By Employment Size of Firm and Type of Goods Leased

Type of Good Leased	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Production Premises and Structures	42.3	73.0	75.0	76.4	73.3	52.5	29.5	64.2
Vehicles	15.4	13.9	10.4	13.6	12.8	19.7	20.5	15.0
Equipment	7.7	9.8	13.2	12.6	11.8	15.6	10.2	12.3
Fixtures, Furniture	3.8	1.6	4.2	4.0	3.5	4.1	4.5	3.7
Land	11.5	22.1	15.3	19.6	18.5	31.1	40.9	23.5
Number of Firms Reporting it is Hard to Say or They Don't Know if Investment was Made	7	7	8	11	33	11	14	58*
Number of Firms Reporting	26	122	144	199	491	122	88	701

* 58 of the 701 firms reported that they may have leased some goods, but were not sure what goods were leased. These firms are not shown in the row responses by type of good leased, but they are shown in the total number of firms reporting in each column.

The number of firms reporting in the zero employment category is so small that the percentages reported may not be representative of all such small firms. Note that only 701 firms, out of more than 4400 firms responding to the investment questions are using leasing in any form. Smaller firms are most likely to lease production premises and structures. Large firms are much less likely to lease production premises or structures. This is probably because large firms when they were privatized were given title to the plant premises that they use. The premises and structures being leased by larger firms may well be for wholesale or retail space used by manufacturing firms to sell their products. The large proportion of smaller businesses leasing premises and structures are probably using these facilities for retail sales. Medium-sized and large firms are more likely to lease vehicles, and much more likely to lease land. Leasing is used primarily for production premises and structures, and secondarily for land, vehicles and equipment. Very few firms lease fixtures and furniture. This pattern is very different from the Western countries. In the United States a large proportion of smaller firms lease equipment (office equipment such as computers, phones, copy machines, other office machines), fixtures and furniture (office furniture, other specialized fixtures such as display cabinets, refrigerators, etc.), and a much larger proportion lease vehicles. Both large and small firms are much more likely in the West to lease large equipment such as cranes, tractors, large trucks, railroad cars, machine tools, etc. There is a real opportunity to increase leasing activity in the Ukraine. The benefit to is clear. The firm has to have less initial capital, if it can "rent" or purchase goods through leasing contracts. The leasing business has grown significantly in the United States over the past 20 years, primarily by expanding the range and number of items that can be leased, and by focusing on expanding services to smaller businesses.

For completeness sake, the distribution of leasing by industry is shown in Table 10-5. The reader should be warned that the sample size, shown at the bottom of each column is so small in most industries that the sample percentages reported in the cells in these columns may not be a close estimate of the population percentage for the cells.

Table 10-5. Percent of Firms Reporting Investments Through Leasing of Goods During the Past Six Months, By Industry and Type of Goods Leased

	Principle Sphere of Activity (Industry)												
Type of Good Leased	**Construction**	**Manufacturing, Mining**	**Agriculture and Forestry**	**Transportation, Communication**	**Wholesale and Retail Trade**	**Eating and Drinking Places**	**Domestic Services, Hotels, Recreation**	**Social and Cultural Services**	**Finance, Insurance, and Real Estate**	**Consulting Services**	**Other Business Services**	**Other**	**Total**
Production Premises and Structures	54.2	49.2	22.7	33.3	70.7	52.9	67.2	87.5	83.3	89.3	75.0	77.8	64.2
Vehicles	23.6	12.9	9.1	29.2	18.3	5.9	6.3	7.5	11.1	7.1	12.5	13.9	15.0
Equipment	19.4	16.9	13.6	8.3	8.9	----	3.1	12.5	16.7	21.4	6.3	19.4	12.2

Fixtures, Furniture	1.4	2.4	4.5	----	4.1	5.9	4.7	----	11.1	10.7	----	5.6	3.7
Land	20.8	30.6	45.5	25.0	25.6	41.2	26.6	2.5	5.6	3.6	12.5	19.4	23.8
Number of Firms Reporting it is Hard to Say or They Don't Know if Investment was Made	9	15	6	5	13	2	4	1	1	----	----	3	59
Number of Firms Reporting	72	124	22	24	246	17	64	40	18	28	16	36	707

The final table in Section 10 shows the distribution of the amounts which firms claim to have invested over the past year. The distribution is shown in Table 10-6.

Table 10-6. Percent of Firms Reporting Total Cost of Goods Purchased for Investment Purposes in Prior Six Months, by Size and Cost Category

Total Cost of Purchasing Goods for Investment Purposes	**Employment Size of Business**							
	Small Zero to 50 Employees					**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
	Zero	**1-5**	**6-10**	**11-50**	**All Small**			
Under 500 UAH	31.0	14.1	3.5	4.0	7.0	0.3	----	3.4
501-1,000 UAH	17.2	14.1	7.1	6.7	8.6	2.3	0.3	4.7
1,001-2,000 UAH	20.7	15.2	8.5	3.7	7.7	1.3	0.6	4.1
2,001-5,000 UAH	17.2	20.7	21.3	14.8	17.5	7.0	1.8	10.5
5,001-10,000 UAH	3.4	15.2	21.3	18.1	17.7	6.7	4.0	11.1
10,001-25,000 UAH	6.9	13.0	20.6	22.5	19.6	23.1	11.9	18.4
25,001-50,000 UAH	----	3.3	9.2	11.1	8.8	13.7	12.2	11.0
50,001-100,000 UAH	3.4	2.2	4.3	9.4	6.6	16.7	13.4	11.0
100,001-500,000 UAH	----	1.1	2.8	9.1	5.7	20.7	26.8	15.3
500,001 UAH or More	----	1.1	1.4	0.7	0.9	8.0	29.0	10.4
Number of Firms Reporting	29	92	141	298	560	299	328	1187

Only 1,187 out of a possible 1,715 firms reported a number when asked for how much they had spent on investments during the past year. The caution evident in releasing these numbers is probably related to the tax reporting issue. The numbers may be biased downward somewhat, but they are consistent across size categories. Small firm expenditures are clustered most heavily in the 2,000 to 25,000 hrivna categories. Medium-sized firms are clustered in the 10,000 to 500,000 hrivna range, and large firms are clustered most heavily in the 50,000 to 500,001 or greater categories. About one quarter of small firm investments are very small (under 2,000 hrivna). Another 20 percent of small firm expenditures are in the 25,000 to 500,000 hrivna range, however, representing more substantial investments.

Investment is important for the stimulative effect it has on growth in the economy. For the Ukraine, investment is critical in the next few years to end the erosion of productive plant and equipment that has been progressing over the past 10 years.

XI. PURCHASING INVENTORY ITEMS AND PAYING RENT FOR COMMERCIAL SPACE

The survey instrument contained two short sets of questions, the first of which asked how many suppliers firms purchase goods from, and the reasons for purchasing from only one supplier, if only one supplier was used. The questions were intended to provide clues as to whether firms were subject to monopoly power which would cause them to pay higher prices than they would in a competitive market. The second set of questions asked firms selling goods on a retail basis about rental of property to use as commercial space. Again, the purpose of this set of questions was to see if ownership or control of property was contributing to excessive rental charges due to monopoly power or limited ownership of commercial space.

1. Purchasing Retail Inventories

Table 11-1 shows whether firms purchased goods from a single source of supply or from multiple sources.

Table 11-1. Percent of Firms Reporting Number of Sources for Purchased Goods, by Size of Firm

	Employment Size Of Business							
Does Your Enterprise Buy All of Its Goods	**Small Zero to 50 Employees**					**Medium 51 to 250 Employees**	**Large 251 or More Employees**	**Total**
	Zero	**1-5**	**6-10**	**11-50**	**All Small**			
From a Single Source	10.9	7.2	5.2	3.0	5.5	2.3	2.3	4.0
From Multiple Sources	89.1	92.8	94.8	97.0	94.5	97.7	97.7	96.0
Number of Firms Reporting	258	431	421	827	1937	832	740	3509

The fear that firms are restricted to purchasing from a single source of supply appears to be unfounded. Ninety-six percent of respondents indicated that they purchased from multiple sources. In the zero employee category, 10.9 percent of firms report that they use only one supplier. With businesses this small, purchasing from one business is probably more of a convenience than a restraint. For those few firms that purchase from only one supplier (only 148 firms) the owners were asked why they limited their purchases to one supplier. The answers to this question are displayed in Table 11-2.

Table 11-2. Percent of Firms Working With One Supplier and Reporting Reasons for Using Only One Supplier, by Employment Size of Firm

Why Does Your Enterprise Work With Only One Supplier?	Employment Size of Business			
	Small 1 to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
You Have a Choice of Several Suppliers, But One is Most Convenient	48.6	36.8	27.8	44.6
There is Only One Supplier in the Marketplace	25.2	21.1	33.3	25.7
When Working With Multiple Suppliers, there is a Growing Risk of Violence, Extortion, etc.	10.8	15.8	----	10.1
Other Reasons	15.3	15.8	33.3	17.6
Number of Firms Not Knowing Why They Use One Supplier	3	2	1	6
Number of Firms Reporting	111	19	18	148

The data do confirm that more small business owners use just one supplier because it is more convenient than using multiple suppliers. Large firms are much less likely to use a single supplier for this reason. One-quarter of the responses indicate that there is only one supplier in the market place. This means that roughly 40 businesses out of approximately 1700 businesses with some retailing activity have to buy from a single supplier. While this is not a very big number, it does mean that some businesses may be subject to monopoly pressure from suppliers. Monopolists raise price and restrict supply when compared to competitive markets. The harm caused through increased prices doesn't necessarily affect the retailer, but it will ultimately lead to consumers paying higher prices.

Perhaps the most interesting response to this question is that 10 percent of the responding firms said that they were inhibited from using multiple suppliers because of fears related to violence, extortion or other criminal activity. Larger firms did not appear to be bothered in this manner, or they did not admit to being bothered when they answered the question. Medium-sized firms were even more likely to report that they were "restricted" to one supplier because of criminal enforcement of penalties if they purchased supplies from someone other than the "approved" supplier. The fact that more medium-sized firms face this problem is consistent with rational behavior on the part of criminals, who choose medium-sized businesses because they are more able to pay what is requested than smaller firms, and less capable of protecting themselves from such requests than larger businesses. Further information on the subject of corruption and criminal behavior as it affects smaller businesses is found in the next section that deals with "hypothetical" or "conceptual" businesses.

2. Renting Commercial Space

Approximately 1800 firms indicated that they used space for commercial or retail purposes. This number included all of the retail firms in the sample, plus a number of manufacturing firms that had some retail outlets. Each of these firms was asked if they rented the commercial space that they were using. The answers are described in Table 11-3.

Table 11-3. Percent of Firms Reporting Whether They do Retail Trade, by Size of Firm

Is Your Enterprise Doing Retail Trade?	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	466	Total
	Zero	1-5	6-10	11-50	All Small			
A.1 Percent of Firms Reporting Yes	52.0	33.2	35.2	4.6	41.0	33.9	41.1	39.5
Percent of Firms Reporting No	48.0	66.8	64.8	57.4	59.0	66.1	58.9	60.5
Number of Firms Reporting	571	624	523	986	2704	944	818	4466
A.2 Number of Firms Reporting Yes	297	207	184	420	1108	320	336	1764
Number of Firms Reporting that they Are in Retail or Wholesale Trade (From Table__)	278	285	197	309	1069	115	55	1239

Several major points can be made from the numbers in the Table. First, many medium and large-size firms that are not in the retailing business have some retail outlets. This implies that many of these firms are vertically integrated, that is, the firm functions not only as a producer, but also as a distributor of its goods. It is possible, even probable that many of these firms also provide their own transportation services. In a country with more competitive markets, most producing firms have given up related activities such as transportation, wholesale distribution, and retailing, because specialized firms (often smaller firms) can provide these services more efficiently. That does not appear to be the case in the Ukraine, but increased competition over time should convince most manufacturing firms to give up non-manufacturing activities and focus on what they do best, i.e., basic production.

Many small businesses specialize in retail or wholesale trade. Only a few non-retail or non-wholesale small firms do any retailing (1108-1069 or 39 firms). Each of the firms with retail activity were asked if they rented space in a public market space (including facilities such as a kiosk). The response is shown in Table 11-4.

Table 11-4. Percent and Number of Retail Firms Reporting That They Pay Rent for the Commercial Space (and/or Facilities Such as a Kiosk)Which They Occupy, By Employment Size of Business

Do You Pay Rent For the Space or Facilities You Occupy?	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Yes (Percent)	67.9	51.9	33.2	31.9	45.1	39.8	44.0	43.9
Number of Firms Reporting Yes	186	107	61	133	487	125	146	758
No (Percent)	32.1	48.1	66.8	68.1	54.9	60.2	56.0	56.1
Number of Firms Reporting No	88	99	123	284	594	189	186	969

Fewer than half the firms with retail outlets said that they paid rent for the retail space they occupied. Small firms were about as likely as medium or large firms to pay rent, with about 45 percent of respondents paying rent. Within the small category, however, there was considerable variance. Zero-employee firms and firms with 1-5 employees, were much more likely to pay rent than firms with 6-10 or 11-50 employees.

The 758 firms paying rent were then asked to whom they paid the rent. Their answers are categorized in Table 11-5.

Table 11-5. Percent of Firms Reporting to Whom They Paid Rent or Leasing Fees for Commercial Properties, by Size of Business

To Whom Do You Pay Rent or Leasing Fees	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Municipal or Rayon Authorities	31.3	40.2	60.0	69.2	47.3	70.2	75.2	56.5
Individuals Who Own or Control Space Being Rented	12.1	9.3	1.7	5.3	8.3	----	4.1	6.1
An Enterprise or Private Person in Whose Territory Your Trading Place is Located (Marketplace, Store, etc.)	53.3	46.7	25.0	27.1	41.1	24.2	22.1	34.6
A State-Owned Enterprise/Organization	2.2	7.5	13.3	13.5	7.9	8.1	8.3	8.0
Other	1.1	----	3.3	1.5	1.2	1.6	1.4	1.3
Hard to Say/Don't Know	2.7	4.7	1.7	2.3	2.9	1.6	1.4	2.4
Refused to Answer	0.5	2.8	1.7	0.8	1.2	----	0.7	0.9
Number of Cases	182	107	60	133	482	124	145	751

About half of small firms paid rent to the municipal or rayon authorities. Another eight percent paid rent to a State-owned enterprise or organization. Medium-sized and large firms were even more likely to rent from the municipal or rayon authorities, with about 70 percent of respondents in this category. Another eight percent of medium-sized and large businesses rented from a state-owned enterprise or organization.

The smaller businesses with zero employees and 1-5 employees were significantly more likely to rent from a private person, however, and less likely to rent from a state-owned enterprise or organization. Larger small enterprises that were more likely to rent either from municipal or rayon authorities or state-owned enterprises or organizations offset this. Larger small businesses behaved liked medium and large businesses with respect to rental behavior. The more important question is not who is the landlord, but how much is the rent. Business owners were asked to describe the impact of the rental payment on their business, as shown in Table 11-6.

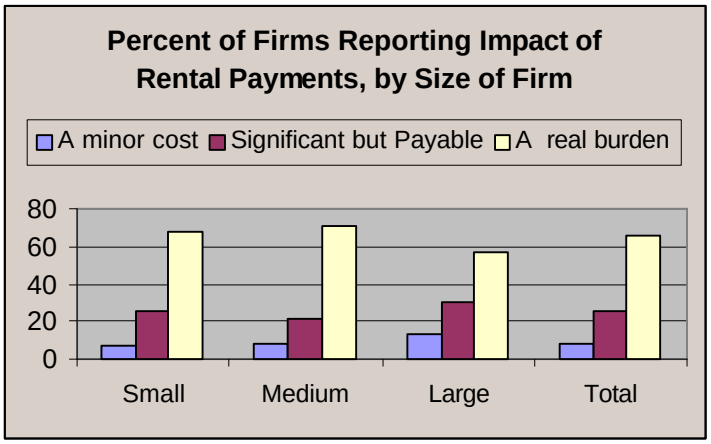
Table 11-6. Firms Reporting the Impact of Rental Costs on Their Business, by Employment Size of Business

How Would You Describe the Impact of Your Rental Payment on Your Business?	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
It is a Minor Cost, Which I Can Easily Pay	5.6	7.1	1.8	10.7	6.8	8.2	12.8	8.2
It is a Significant Cost, but I can Pay it Without Much Difficulty	24.1	30.3	35.1	18.2	25.3	20.9	30.8	25.7
It is a Significant Cost, and it is a Real Burden to Sell Enough to Be Able to Pay It	70.4	62.6	63.2	71.1	67.9	70.9	56.4	66.1
Number of Businesses Reporting	162	99	57	121	439	110	133	682

Most businesses, regardless of size of business, said that rent was "a significant cost, and it is a real burden to sell enough to be able to pay it." Medium-sized businesses and larger small businesses in this case joined with their smaller counterparts in complaining about the burden. Slightly more than half of large businesses (56.4 percent) also said that rent represented a real burden. About a quarter of businesses said rental expenses were a significant cost, but they could pay the costs without much difficulty. Eight percent of firms said that rent was a minor cost.

Smaller businesses in every country face rental costs that may be burdensome. Many forms of rental lease in the United States establish the rental as a percentage of the revenue earned by the renting business. Other prime locations charge high rents because there are many competitors bidding for access to the best space. In a competitive rental market, the higher rents will signal landlords or building developers to do something to increase the supply of desirable space. Landlords will renovate existing space or order the building of new space. Competition among

Figure 11-1: Percent of Firms Reporting Impact of Rental Payments, by Size of Firm



landlords will work to keep rentals affordable, and the supply of rental space will be sufficient that retail tenants can choose the location they want at relatively reasonable rates. Fewer businesses in a competitive rental market in the United States, for example, are likely to complain that rent is a major burden. In European countries the situation may be more like the Ukraine, where restrictive zoning of space may make it difficult to expand the supply of rental space.

The question for the Ukraine is simply: Do the municipal and rayon authorities, and the state-owned enterprises and organizations that are the major landlords have enough knowledge and enough incentive to manage their rental properties like competitive private landlords? If not, then space will not be managed optimally from the standpoint of meeting market demands, and fewer businesses will be able to find usable space.

Local authorities also have an inherent conflict of interest in that the local authority sets the rules that affect private landlords. If the authority refuses to let private landlords expand or improve their space, then the local authority will receive higher rents for its space, even if the space is substandard. Municipal and rayon authorities may do better by selling off commercial space, and allowing landlords and tenants to compete to determine the quality and quantity of usable space. The local authorities can maintain control over zoning and can increase property taxes since the value of the rental space will be increased. Questions about use of land and buildings for commercial purposes can be dealt with through public hearings that reflect public interest in the use of the space.

This model is similar to Western models in use in the United States and Europe. The argument being made, however, is not an argument over Ukrainian or non-Ukrainian practices, but an argument over the best methods to insure that land is used optimally. Some countries do choose public control over many buildings, particularly in town centers, others seem to let markets work through private ownership. It is worth asking how well the public authorities are doing in managing space in the Ukraine, however, and whether current space management practices serve the public interest effectively.

XII. HOW WOULD A CONCEPTUAL BUSINESS BEHAVE?

A. INTRODUCTION

It has been noted at several points in the report that there is a possibility that an owner or manager of a firm may not be totally truthful in answering a question. This is particularly true for questions dealing with revenues, for example, where fear of the tax authorities encourages individuals to say nothing or to underestimate their revenues when answering an interviewer's question. There is also some doubt that respondents would answer truthfully when asked about the need to make informal payments to local or state officials, or when asked about criminal behavior or payments to criminal elements. One way of attempting to deal with this is to ask the business owner or manager to think of another firm, a firm that he has knowledge of, but a firm that he doesn't have to identify when answering a question that might seem difficult if the answer were based on his/her own firm.

Participants in the survey were asked if they could identify such a firm in their mind. For those who could, an extensive and very interesting set of questions followed, many of which dealt with sensitive subjects. This section outlines the answers given by owner/managers after they identified a "conceptual" business. The first question asked, of course, was "Do you have such a person in mind? The responses are shown in Table 12-1.

Table 12-1. Percent of Firm Owner/Managers Identifying an Entrepreneur for Purposes Of Discussing a "Conceptual Business" by Employment Size of the Owner/Manager's Firm

Do You Have Such a Person in Mind?	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Yes	53.5	61.0	52.0	57.2	58.2	52.7	47.6	55.1
No	46.5	39.0	38.0	42.8	41.8	47.3	52.4	44.9
Number of Firms Reporting	592	630	526	980	2728	943	813	4484

To assist with answering this question, the interviewer also read the following introductory paragraph before actually requesting an answer. "And now I would ask you to remember (NOT TO NAME) an entrepreneur whom you know better than others. This can be a man or a woman, yourself or a neighbor, a friend or a relative, it does not matter. It is only important that you have in mind the same person when answering the following questions. When asking about this person I will call him/her an ENTREPRENEUR." Approximately 55 percent of the business

owners were willing to identify a "conceptual" ENTREPRENEUR. Small business owners were slightly more willing to go along, while owner/managers in large firms were slightly less willing to conceive of someone. The sample of conceptual entrepreneurs is quite large, however, and sufficient to provide some reasonable answers to the questions which follow. The first follow-on question simply asked how many employees were in the entrepreneur's firm. The answers are described in Table 12-2.

Table 12-2. Percent of Firm Owner/Managers Reporting the Number of Employees for Their "Conceptual Firm", by Employment Size of Owner/Manager's Business

Number of Employees in the Conceptual Firm	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Zero	34.4	11.8	11.8	11.4	16.3	10.9	12.1	14.6
From 1 to 5	37.8	42.7	28.3	27.8	33.6	23.4	23.2	30.0
From 6 to 10	18.4	23.3	30.9	27.2	25.2	21.6	21.5	23.9
From 11 to 50	7.0	17.3	23.0	24.6	18.9	25.2	25.4	21.1
From 51 to 250	1.3	3.6	3.6	7.3	4.4	14.5	11.0	7.4
Over 250	1.0	1.4	2.3	1.8	1.6	4.3	6.8	3.0
Number of Firms Reporting	299	365	304	508	1476	440	354	2270

The responses to this question are organized not by the employment size of the conceived firm but from the employment size of the owner/managers who are making the conceptual experiment. Organizing the data in this manner allows us to determine whether the conceived firm is smaller, the same size, or larger than the firm of the owner conceptualizing the firm. The general trend is for an owner/manager to identify a smaller firm rather than a larger one. Small firm owners generally identified an entrepreneur who owned a small firm. Many medium-sized and large firms also conceived of a small firm, but the owner/managers were more willing to identify a medium or large business. Almost 80 percent of the firms identified were small. This can be compared to the firms of the owner/managers doing the experiment, only two-thirds of which were small.

The owner/managers were then read a long introduction before being asked the next question. The introduction went as follows:

When economic conditions in the country are hard, entrepreneurs are often forced to find a way out by underreporting his/her activities, establishment of informal relations with public officials and the use of other similar techniques. For development of a program to deal with economic

crisis one has to estimate the scale of such phenomena in general. Tell me please whether you have ever heard about such techniques of business activity? The answers are shown in Table 12-3.

Table 12-3. Percent of Owner/Managers Reporting Whether They Have Ever Heard of Underreporting of Activities, Informal Relations with Public Officials, and Similar Activities, by Size of Owner/Manager/s Business

Have You Ever Heard of Such Activity?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Yes	84.3	87.0	87.0	85.3
No	15.7	13.0	13.0	14.7
Number of Firms Reporting	1120	377	295	1792

An overwhelming majority (85.3 percent) of owners reported being aware of such techniques. The owner/managers were then asked whether the entrepreneur in their mind had a registered business, as shown in Table 12-4.

Table 12-4. Percent of Owner/Managers Reporting that Their Conceptual Business is Registered With the Authorities, by Size of Owner/Manager's Business

Does the Entrepreneur You Have in Mind Register His/her Business?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Yes	92.2	94.3	95.5	93.1
No	7.8	5.8	4.5	6.9
Number of Firms Reporting	1215	400	309	1924

1. Entrepreneurs and Taxation

Most of the conceptualized businesses were identified as registered businesses. This is important, because the next question asks what proportion of taxes the entrepreneur would pay. The question read, "What percent of total taxes are really paid by the ENTREPRENEUR you have in mind?" Table 12-5 provides the answer.

Table 12-5. Percent of Owner/Managers Reporting What Share of Taxes Their "Conceptual" Business Owner Really Pays, by Size of Business

What Percent of Total Taxes do you Think the Entrepreneur Really Pays?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Hard to Say/Don't Know	26.6	27.9	18.6	25.5
1-10 Percent	7.4	7.2	11.2	8.0
11-20 Percent	6.8	6.1	6.4	6.6
21-30 Percent	8.1	6.4	10.2	8.0
31-40 Percent	2.5	3.2	2.4	2.6
41-50 Percent	13.2	10.3	14.2	12.7
More Than 50 Percent	35.5	39.0	36.9	36.4
Number of Firms Reporting	1117	377	295	1789

The answers tabulated here make it easy to understand why the single most important problem identified by business owners is the tax system. Only 36.4 percent of the business owners think that a business owner would pay more than 50 percent of the total tax due to the authorities. One in seven respondents states that the entrepreneur would pay less than 20 percent of the tax due. Clearly, most of the respondents do not think that the tax administration can collect the taxes due. The system as it now stands breeds absolute contempt for the tax law. But business owners do not appear to believe that advocating cheating on taxes, or actually cheating on taxes is a crime. This behavior appears to be viewed as what a reasonable person would do to survive.

Given the responses above, the issue is why the government would leave the tax law in its current form. Honest tax administration and a reasonable tax burden could hardly do worse than the current system in terms of tax collections.

Business owners were next asked to identify how taxes were evaded. The answers are shown in Table 12-6.

Table 12-6. Percent of Owner Managers Reporting Methods Used to Evade Taxation, by Size of Owner/Manager/s Business

Methods of Evading Taxation	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Gets Part of Revenues in Cash	62.0	60.5	66.5	62.4
Gets Part of Revenues in an Unregistered Account in a Foreign Bank	3.4	5.4	3.7	3.8
Registers Revenues with People Who Have Privileges in Taxation	12.1	15.1	12.7	12.8
Deducts Expenses for the Items That Have a Smaller Tax Rate	21.1	24.1	25.7	22.5
Registers Firm in an Off-shore Zone or in a Free Economic Zone in the Territory of the Ukraine	4.9	6.4	7.3	5.6
Hard to Say or Don't Know	21.3	24.7	17.1	21.3
Refused to Answer	5.5	3.7	4.9	5.0
Number of Firms Reporting	915	299	245	1459

Many respondents appeared uneasy about answering this question. More than a quarter of the respondents said they didn't know how taxes were evaded, or they refused to say what methods were used. Almost 30 percent cited methods that appear to be honest, i.e., registering the firm in a free economic zone, or deducting expenses for items that have smaller tax rates, assuming that the products purchased were entitled to lower rates. The most popular answer implies that doing business with cash payments makes it difficult to track the transactions-and this certainly appears to be true. The other methods mentioned, having payments made to a foreign bank account, and registering revenues with someone that is entitled to a lower tax rate, also imply that evading the truth about revenues and expenses is legitimate behavior. One negative consequence of this behavior is that the state loses tax revenues. An even more negative consequence is that the state encourages its citizens to lie and otherwise evade the law in order for a business to survive. The benefits, if there are any, is that not all of the money hidden from the state is spirited out of the country, or spent on luxury consumption. Some portion of it, and perhaps a major portion, goes to some form of business investment, helping the economy to grow. The same argument has been made with respect to funds extorted from businesses by criminal elements. Some of this money undoubtedly leaves the country, some of it is spent on excessive consumption, but in the end some of it comes back into the system in the form of loans or investments. While these investment arguments may be correct, they represent an inefficient way to raise money for investments. They also have extremely negative side effects in terms of breeding disrespect for the law.

The basic principles of taxation have been agreed upon for some time. Taxes should be roughly equitable (not excessive in terms of the burden on land, labor or capital), simple to understand and administer, collectable, and not so high that they have negative effects on economic incentives. The current structure of the Ukrainian tax system appears to meet none of these criteria. The drag created on the economic growth of the country is demonstrable in lower growth rates, a large underground or gray economy, and a culture of lying to the government and evading taxes.

The next question for the business owners asked them to consider what level of taxes the entrepreneur could pay without serious damage to his/her business. The answers are shown in Table 12-7

Table 12-7. Percent of Owner/Managers Estimating What Proportion of Total Official Taxes Could Have Been Paid by Their "Conceptual" Entrepreneur Without Doing Serious Damage to the Business, by Employment Size of Owner/Manager's Business

What Percent of Total Official Taxes Could be Paid Without Harming the Business	Employment Size of Business							
	Small Zero to 50 Employees					Medium 51 to 250 Employees	Large 251 or More Employees	Total
	Zero	1-5	6-10	11-50	All Small			
Hard to Say or Don't Know	22.0	16.2	11.2	15.6	16.0	14.7	16.8	15.8
1-10 Percent	20.6	18.8	15.1	11.7	15.7	12.7	9.3	14.1
11-20 Percent	18.4	19.7	24.3	16.0	19.1	12.3	14.3	16.9
21-30 Percent	15.7	17.2	25.9	27.0	22.3	26.0	20.5	22.8
31-40 Percent	8.1	7.6	5.4	6.9	7.0	9.8	10.6	8.1
41-50 Percent	10.8	12.1	10.4	14.9	12.5	14.5	17.4	13.7
More Than 50 Percent	4.5	8.3	7.7	8.0	7.4	10.0	11.2	8.5
Number of Firms Reporting	223	314	259	463	1259	408	322	1989

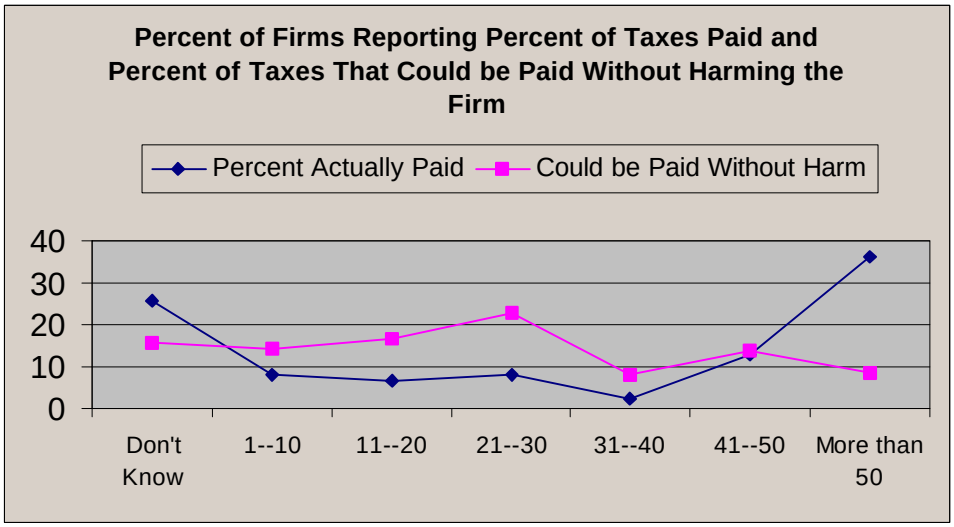
About one in seven owners believes that the conceptual entrepreneur can pay less than 10 percent of official taxes without doing harm to the business. One in six respondents say that no more than 20 percent of official taxes can be paid without harming the business. Only one business owner in twelve believes that a business can pay more than 50 percent of the total tax due under the current law. An easy way to see the import of these numbers is to compare the Total response in Table 12-7 with the Total column in Table 12-5. The results are shown in Table 12-8

Table 12-8. Percent of Owners Reporting the Proportion of Total Taxes Collected from an Entrepreneur, and the Proportion That Could be Collected Without Harming the Entrepreneur's Business

	What Percent of Total Taxes Are Actually Paid?	What Percent of Total Taxes Could be Paid Without Harm to the Company?
Hard to Say/Don't Know	25.5	15.8
1-10 Percent	8.0	14.1
11-20 Percent	6.6	16.9
21-30 Percent	8.0	22.8
31-40 Percent	2.6	8.1
41-50 Percent	12.7	13.7
More than 50 Percent	36.4	8.5

These tables, allowing for the fact that business people may exaggerate with respect to taxes actually paid, and underestimate the taxes that could be paid without doing harm to the firm, indicate that most business owners think that the current tax system is totally unrealistic. When reading Table 12-5 it is readily apparent that most business owners thought that the state was not very effective in collecting taxes. Yet, if Table 12-7 is any measure, the state tax authorities are collecting more at every level of collection than business owner/managers believe can be tolerated at that level without doing harm to many of the businesses. For example, the business owners responding to these questions said that the state was collecting more than 50 percent of

Figure 12-1: Percent of Firms Reporting Pecent of Taxes paid and Percent of Taxes That Could be Paid Without harming the Firm



taxes due from 36.4 percent of businesses, yet these same respondents say that no more than 8.5 percent of firms could afford to pay at these levels. The implication is that the 27.9 percent of firms that are paying more than 50 percent of the taxes due are being hurt badly by the tax collections. The same relationship holds true at every other level of tax collection. More than 50 percent of respondents think those firms will be hurt unless they pay 30 percent or less of the actual taxes due. Is this realistic in terms of the experience of other countries?

Saying anything about nominal and effective tax rates in any country, let alone across several economies is very difficult. The nominal rates may be quite high in a given country, but after deductions, exemptions, and adjustments, the effective tax rate may be much lower. The rate of inflation, and the extent to which the rate of inflation is anticipated can affect the effective tax rate. The question of what taxes are included in business taxes is also at issue. Are payroll taxes for social security and health insurance business taxes paid out of profits, or wage taxes paid out of wages? Is a value added or a sales tax a tax on consumption or a tax on business? Is the impact of a tax shiftable? Can the tax appear to be a tax on business, but actually be a tax paid by consumers or workers? All of these issues are debatable.

What can we say about business tax rates? If we talk about taxes on business income, then it appears that many of the European and American countries have roughly equal tax rates of about 35 percent on business income. Actual effective tax rates vary because of varying deductions and exemptions, but the effective rate for most businesses appears to be around 25 to 30 percent. This may vary some by size of business, although most countries appear to be trying to make business taxes size neutral. If business taxes are size neutral, and if taxes on capital and labor and land are roughly equal, then the tax system does not distort resource utilization, and businesses are able to use resources in the most efficient manner possible, without worrying about excessive tax burdens, if they choose certain combinations of inputs.[44] Resource prices then tend to drive factor proportions in producing goods and services as businesses attempt to minimize costs for any given level of output. If business taxes are not size neutral, then many Western countries attempt to make the tax system slightly favor smaller businesses. This favoritism is not because smaller businesses have special favor as an interest group. It is a realization on the part of the legislature that smaller businesses make important contributions to the general welfare that warrants some tax relief.

Smaller businesses generate more jobs relatively speaking than any other size class of business. Smaller businesses in a given industry tend to use less capital per worker than larger businesses in the same industry. For any country with an excess supply of labor (and the Ukraine certainly falls within this class) then smaller businesses will produce more jobs with less capital, assuming that the products and services being produced by smaller businesses are being demanded by consumers. Encouraging smaller businesses stimulates job generation, therefore, in many cases.

Smaller businesses are also stimulated through partial business tax relief, because smaller businesses are vital to a steady flow of innovation and the bringing of new products and services

[44] But note that the United States deliberately provides a lower rate of taxation to smaller enterprises. The concept here is that the rate is effective for the first tranch of earnings for all businesses, and it creates equity with the personal income tax rates for workers with relatively low earnings.

to market. Smaller enterprises are constantly testing whether particular market opportunities are viable. Smaller businesses do this with less capital input, therefore minimizing the cost of making the test. Larger businesses have an advantage when the demand for the product or service being produced is stable and predictable. This is true because larger businesses can be built at the proper scale to capture economies of scale and produce more cheaply than smaller businesses. But even in the seemingly stable industries, there are fluctuations in demand that are unpredictable. Smaller businesses tend to specialize in adjusting output levels in response to variable demand. Smaller businesses help respond to fluctuations in demand, therefore, until larger businesses can be sure that a demand shift is going to be permanent. The tax system, in making taxes a bit lower on smaller businesses is helping to keep the economy more flexible in terms of reacting to shifting market demands.

In the Ukraine, the tax system does not appear to be equitable between capital, labor or land. Nor does it appear to that business income or profit taxes are set in a manner that is competitive with similar taxes in other countries. In rationalizing the tax system, the government of the Ukraine should look to the experience of the Western countries. The business tax rates in the West appear to be lower in the Ukraine, with far less negative effects on business.

2. Entrepreneurs and Informal Relations

Taxes are not the only issue for the "conceptual" business. Business owners were asked to say whether businesses could do business without "informal relations" with the state and local authorities. The answers are shown in Table 12-9.

Table 12-9. Percent of Owner/Managers Reporting Whether Their "Conceptual" Entrepreneur Can Do Business Without Informal Relations, by Employment Size of Owner/Manager's Business

Is It Possible to do Business Without Establishing Informal Relationships With The Authorities?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Yes	20.0	18.7	14.6	18.9
No	80.0	81.3	85.4	81.1
Number of Firms Reporting	1150	369	294	1813

More than 80 percent of those responding to the questions about a conceptual or hypothetical business owner said that a firm could not do business without establishing informal relations with some agency officials. The respondents were also asked to say which agencies were most important from this standpoint. The agencies are identified in Table 12-10.

Table 12-10. Percent of Owner/Managers Reporting What Agencies It Is Most Important for Their "Conceptual" Entrepreneur to Have Informal Relations With, by Employment Size of Owner/Manager's Business

With Officials of What Agencies Is It Most Important to Have Informal Relationships?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
Ministries, Other Central State Executive Agencies	3.9	6.2	6.0	4.7
President's Administration	3.1	3.2	3.6	3.2
Verkhovna Rada	1.4	2.9	3.9	2.1
State Owned or Semi-state Banks	4.2	5.6	10.3	5.5
State TV	0.5	0.3	0.4	0.4
Oblast Authorities	8.2	10.9	12.8	9.5
Municipal Authorities	37.1	28.5	34.5	34.9
Rayon Authorities, Local Self-Governance	23.1	20.3	18.9	21.8
Customs	15.8	15.3	20.6	16.5
Tax Inspection	67.5	65.0	70.5	67.5
Prosecutor's Office	9.0	8.2	11.4	9.2
Police	21.5	17.9	17.8	20.1
Other	4.6	4.3	4.1	3.6
Hard to Say or Don't Know	9.7	14.1	6.4	10.0
Refused to Answer	4.6	5.6	3.9	4.7

Only a few businesses indicated that it was important to deal with high level officials such as the President's Administration, the members of the Verkhovna Rada or the senior Ministers of the country. It was the tax officials that had to be approached though informal relationships. As usual, the tax authorities were mentioned far more often than any other agency. After the tax authorities, however it was local officials, the municipal authorities, the rayon authorities and the police that were named most frequently. This is not surprising. Local governments have the advantage of being close to local businesses, making local businesses easy to inspect or harass. It is also easier for local authorities to check on what firms are actually doing.

Given the web of informal relationships, it seems natural to ask whether the entrepreneur gives part of his profits to representatives of public agencies. The answers are found in Table 12-11.

Table 12-11. Percent of Owner/Managers Reporting What Percent of Profits Their "Conceptual" Entrepreneur Has to Pay to Representatives of Public Agencies, by Employment Size of Owner/Manager's Business

What Percent of Profit Has to be Paid to Officials of Public Agencies?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
None	33.8	34.0	23.3	32.2
1-9 Percent	18.3**	9.2	17.4	16.3
10 Percent	23.4	24.4	20.7	23.2
11-20 Percent	14.7	28.8***	17.3	15.3
21-40 Percent	6.8	10.5	19.3#	9.4
50 Percent or More*	4.2	6.3	2.0	4.3
Number of Firms Reporting	619	209	150	978

*Respondents were free to choose any percentage between zero and 100 percent. No Respondent suggested a share of profit between 40 and 50 percent. One Respondent chose one-half of one percent. This response is not shown in the Table above, since it is midway between the first two Percentage Categories.

**Approximately one-half of these responses were clustered at 5 percent. This proportion is representative for all of the responses in this row.

***The majority of responses in this row are clustered at 15 percent and 20 percent. Almost 23 percent of medium-sized business owners specified 20 percent.

#Approximately two-thirds of the 19.3 percent was at the 30 percent level.

The good news is that approximately one-third of the respondents said that no payments had to be made to public officials. The bad news was that the other two-thirds indicated that positive payments had to be made. About 75 percent of the respondents said that the profit share paid unofficially to officials was between 1 and 20 percent. Customs differ from country to country, but most of the Western countries have strong prohibitions against the acceptance of informal payments.[45] Other countries are much more comfortable with such payments. Most of the Latin American countries fall into this category, along with many of the Asian countries. In Africa, the local and state officials are so underpaid that business taxes and fines must be used to keep the officials "friendly". In other countries such as the U. S., the attempt to make such payments to a public official would be strongly condemned, often supplemented with criminal or civil actions against the individuals offering and accepting the payments.

[45] But examples of public corruption can be found at every level of government, in the United States and in most Western European countries. The issue of corruption is a relative one. There will always be some corrupt officials and some business people that will offer bribes. Strong anti-corruption laws, and vigorous enforcement of the law will serve to keep corruption at a low level.

Are informal payments also made to representatives of "unofficial force groups," racketeers, etc. Table 12-12 provides the answer.

Table 12-12. Percent of Owner/Managers Reporting What Percent of Profits Their "Conceptual" Entrepreneur Has to Pay to Unofficial Force Groups (Rackets), by Employment Size of Owner/Manager's Business

What Percent of Profit Has to be Paid to Unofficial Force Groups?	Employment Size of Business			
	Small Zero to 50 Employees	Medium 51 to 250 Employees	Large 251 or More Employees	Total
None	63.9	61.3	56.6	63.9
5 Percent	7.7	10.1	5.4	7.8
10 Percent	15.5	11.5	19.9	15.4
15 Percent	3.0	4.6	3.6	3.4
20 Percent	2.4	5.1	3.6	3.1
25 Percent	0.9	0.9	1.2	1.0
30 Percent	1.1*	1.4	1.8	1.2
Number of Firms Reporting	742	217	166	1125**

*The column responses for each column account for approximately 95 percent of total responses. All but ten of the non-reported cases were below the 30 percent level.

**These numbers include the roughly five percent of responses not categorized in the Table.

Two-thirds of the respondents indicate that their conceptual entrepreneur does not pay extortion money to criminal elements. But one in six business owners report that 10 percent of profits goes to such payments, and about 30 percent of firms report payments of five to 25 percent of profits.

Between official taxes, unofficial payments to agency representatives, and payments to criminal elements, it is difficult to see how enough profits can be left over to help redevelop industries, improve efficiency or increase employment. But business owners are making money in many cases, and they are reinvesting it in their businesses. The investment may be hidden, but it is occurring. Entrepreneurs in the Ukraine, like entrepreneurs elsewhere learn to cope with many problems. Policy initiatives to minimize extortion, bribery and other forms of corruption are likely to return major benefits to the country, however, by increasing the efficiency of market transactions.

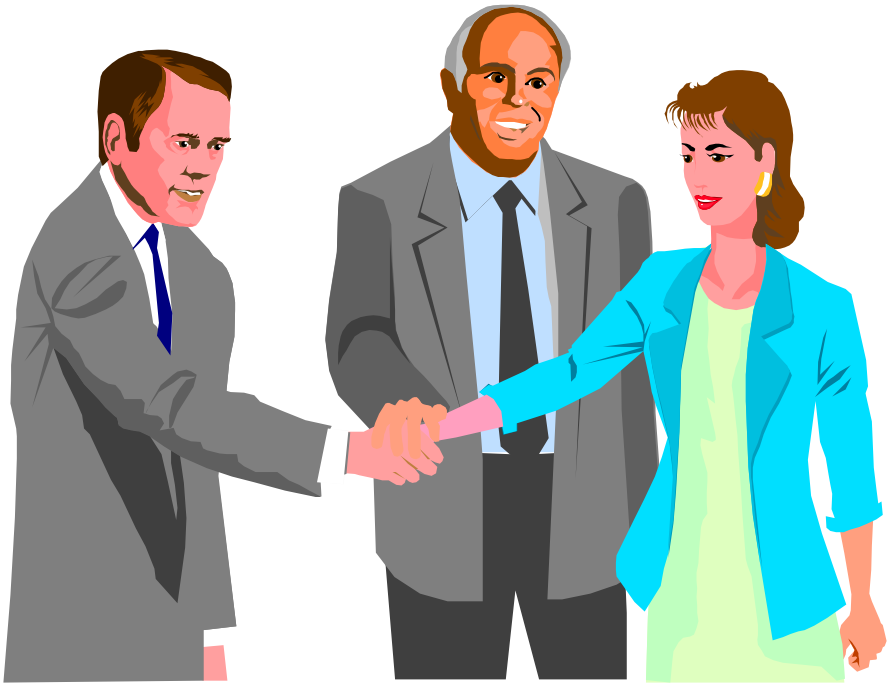
APPENDIX A

KIEV INTERNATIONAL INSTITUTE OF SOCIOLOGY

Ukraine SME Survey

METHODOLOGICAL REPORT

Kiev, 1999



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, in which we fixed the social-demographic information about all household members aged 15 and older and on forms of their employment (wage employees or self-employed). For polling hired employees we used the abbreviated version of questionnaire for

employers which included only such questions about the enterprise-employer in which the wage employee was quite competent.

On making street survey of visible firms we used the **"Rout Map of Businesses"** to which we inserted additional information about the firms selected at random (name, kind of activity, number of employed).

In total, the final data file of the survey included 3904 interviews of registered enterprises, 3267 interviews of wage employees, 646 interviews of self-employed household members, and also 996 interviews of "visible" firms during street polling.

The response rate in three directions of survey made:

- questioning registered firms– 67.5%
- questioning households- 81.2% for households and 87.5% for household members.
- street questioning of businesses (enterprises) – 66.9%

The sampling error in questioning households does not exceed 2.6%.

1. DEVELOPMENT OF TOOLS

1.1 Preparation of questionnaires.

Development of tools included preparation and pre-test of questionnaires, Manuel for the interviewer on making polling, and other field documents (see full set of field documents in SUPPLEMENT).

1.2 Pre-test.

The purpose of pre-test is the description of possible problem situations by means of modelling of survey process "in miniature" and the development of proposals for elimination of possible problems at all stages of further work.

In this pre-test the following tasks were set before the project task force:

- Testing the procedure of sampling filing;
- Testing accessibility of potential respondents;
- Testing field tools of survey (questionnaire, directions to interviewee on respondents selection and work with questionnaire);
- Evaluation of terms of field work fulfil (time spent by each interviewer for making a certain number of interviews)

- Testing the procedure of field control and data input
- Evaluation of compliance of data received during the polling to tasks of survey.

The pre-test was held in February 9-17 and included:

- preparation and edition of questionnaire in Ukrainian and Russian languages
- formation of enterprise sampling
- Briefing for interviewers on selecting respondents and work with questionnaire
- Pre-test data input into computer
- Holding briefing on the pre-test results with the participation of KIIS research group and interviewers.
- Preparation of report on pre-test on the basis of interviewers reports and analysis of marginal.

Five experienced interviewers from KIIS who had a special training for carrying out pre-test and participated in practically all KIIS pre-tests for recent 3-5 years took part in this pre-test.

The field stage of the pre-test was held in three directions:

1) Polling of enterprises on the basis of address sampling. In this case the interviewers received the addresses of enterprises in advance for polling (questioning).

2) Street polling of “visible” enterprises, selected for polling at random on the territory of postal districts determined in advance.

3) Polling in the households of all employed household members aged 15 and older.

In total, 57 interviews were held during pre-test, of them 26 - at enterprises from address sampling, 9 - at enterprises from street sampling. During the polling in 16 households 20 people were interviewed, 18 of them had 1 job, and 2 persons - 2 jobs. That's why the number of questionnaires collected from these households made 22.

The main conclusions from pre-test are, first, approximate definition of response rate for polling registered enterprises according to address lists. On estimation of interviewers and KIIS research group, the expected response rate had to be about 30-40%. The second conclusion from pre-test was the understanding of the fact that before the beginning of the field stage a detailed terminology training for interviewers of this survey was needed - in particular, they should learn the main economical categories used in this questionnaire.

Besides, the pre-test showed the problems of questionnaire and became the basis for the revision of tools and manuals for questionnaire.

2. SAMPLING

2.1 Sampling development

As it was mentioned above, the survey included three directions based on different principles of sample:

1) Polling of 5000 registered Ukrainian enterprises;

2) Polling of 4000 households;

3) Street polling of “visible” businesses.

2.1.1 Sampling of registered enterprises.

Sampling of registered enterprises was formed on the basis of lists of State Committee for Statistics of Ukraine, which has several databases of ALL registered enterprises. This list was formed on the basis of State Committee for Statistics own files (each newly created enterprise undergo an obligatory registration at the State Committee for Statistics), Tax Inspection files (Tax Inspection passes the current information on closed enterprises to the State Committee for Statistics), and also municipal bodies files.

The most complete database of State Committee for Statistics accounts for about 600000 enterprises. Entry on each enterprise includes its name, registration code, address, type of activity, form of ownership. Besides, there exists the database which contains 250000 enterprises with the indication of the employment size (number of employed) at each enterprise.

The main principle of sample of the registered enterprises was the quoting of enterprises by the employment size, that’s why the main body of sampling (enterprises with the employment size more than 10 people) was formed on the basis of the second data base (250000).

At the preliminary stage of survey (February 1999) KIIS made an agreement with the Marketing Department of the Research Institute of Statistics of the State Committee for Statistics of Ukraine on acquiring sampling on the basis of databases 250000 and 600000 (see the KIIS complete request for sampling formation in SUPPLEMENT).

The sampling was prepared according to the following characteristics:

À. On the basis of data base 250000:

1) 3000 enterprises with number of employed 251 and more;

2) 3000 enterprises with number of employed from 51 to 250;

3) 3000 enterprises with number of employed from 11 to 50;

B. On the basis of database 600000 - 6000 enterprises, among which only the enterprises with the number of employed up to 10 people were to be polled.

The last sample made up of 6000 enterprises was based on the basis 600000 because of the following reasons:

à) as the database 250000 consisted of enterprises regularly reporting to the corresponding state bodies, it was possible to select from database 600000 the sub-group of enterprises that were not very stable and, thus, were of special interest for our survey (we regarded the hypothesis that the share of informal activities is quite large at such enterprises);

b) as the small enterprises are considered to be the most unstable group of enterprises, the decision was taken that on the basis of base 600000 the sampling of enterprises with the least number of employed (up to 10 people) would be formed.

On forming all four sub-samplings the following criteria were considered:

- The enterprises which are not engaged in production and sale of goods in Ukrainian market were excluded (budget organisations - state schools, hospitals, kindergartens; public and religious organisations, state bodies and power structures, etc.); also were excluded from the list the enterprises engaged in agricultural activity with the exception of enterprises, which besides the agricultural activity are engaged in transportation and processing of agricultural production.

- The enterprises which are engaged in agricultural activity were driven out of the list with the exception of enterprises which besides agricultural activity are engaged in transportation and processing of agricultural production.

- All enterprises were selected in 200 populated areas, which corresponded to the populated areas where the household polling was carried out.

Each enterprise from three groups of employment size on the basis of base 250000 received a random number with the help of random number generator according to which the enterprises were sorted out. The first 3000 enterprises from each group made a sampling of enterprises necessary for survey.

All enterprises of the base 250000 where the number of employed exceeds 10 persons were excluded from sampling on basis 600000. As a result, we obtained the database of enterprises necessary for the 4^{th} sampling of 6000 enterprises. Each enterprise of this base with the help of random number generator also received a random number according to which this base was sorted out. The first 6000 enterprises were included into sampling.

On estimation of the State Committee for Statistics experts, the maximally possible mistake in final files containing the information on 15000 enterprises makes 10%. This mistake is the result of incorrect or wrong entries in the primary bases of State Committee for Statistics

of Ukraine (according to the results of questioning which was held on the basis of this sampling, this error appeared to be larger - see Chapter 4 of this report).

Thus, KIIS received a sampling consisting of 15000 enterprises of which 5000 enterprises were to be polled. In other words, this sampling contained a triple supply of enterprises for polling.

Further, before the beginning of fieldwork the sampling on four groups of enterprises was divided into separate lists according to the number of brigades of questioning network of interviewers with preserving of ordering at random numbers. Further, the lists were divided into 3 equal parts - the main list, the first supplementary, and the second supplementary. According to the conditions of realising this sampling by the interviewers they were forbidden to pass to another list before all the addresses from the previous list would have been worked out.

2.1.2. Sampling development on households polling

The sampling which was used in household's survey is the standard KIIS procedure worked out on the basis of method of constructing survey for polls representative for the population of Ukraine.

2.1.2.1. Sampling description

In conducting this research over the past nine years, we have been able to develop a survey centre that can claim to approach international standards in survey research. We have participated in an eighteen-month international program on sample design, with the participation of the world-renowned sampling expert Leslie Kish and the chief of sampling for the Survey Research Centre of the University of Michigan, Steve Heeringa; both have contributed specific suggestions to our sample design, which is still evolving (see Swafford M., Kosolapov M., Kish L., Heeringa S.. Sample Design for Republics of the Former Soviet Union. - National Council for Soviet and East European Research, 1995; that book has also the description of our sample, but not the last one).

A specific feature of our approach to sampling is ensuring random selection at every stage of sampling.

2.1.2.2. General concept of the sampling

We, as usual, tried to use a design close to a true probability sampling, since only that "guarantees" unbiased results and the proper calculation of sampling errors. This means that we shun quota samples[1], snowball techniques, random-walk samples, haphazard street interviews,

[1]We realize that some reputable Western marketing organizations use quota samples to cut costs. However, presumably they have taken the trouble to conduct methodological studies to demonstrate that their approach produces the same results as the standard produced by a probability sample. No such methodological studies have been published about quota (or random-walk) samples in the NIS, and it would be naive to assume that the results would be the same. This is especially true at the last stage of selection.

and any other methods that permit either discretion on the part of interviewers or self-selection by respondents.

When it goes about sampling within a populated entity in the NIS, most survey organisations use address bureaus or voter lists as their sample frames. The disadvantage of lists based on the address bureau is that, especially in large cities, a sizeable proportion of people do not live where they are registered. Also, certain categories of people -- so-called limitchiki, whose registration depends on holding (often undesirable) employment in the city -- may be represented improperly. Furthermore, lists are simply not as well-maintained as they were under the Soviet regime. Housing lists could in principle be used as a basis for building a list of dwellings and apartment numbers (rather than household identities) to serve as a sample frame. However, the information is contained on hand-written cards, which are more awkward to use than alternatives.

As for voting lists, they do not include individuals under eighteen, so they do not serve well in a study of those between 15 and 18. Again, they are seemingly less well-maintained than they were under the Soviet regime, when activists were charged with getting more than 99.5% of the population to the polls. Without special provisions, households with more voters would be more likely to fall in the sample than those with one voter. Finally, the lists are maintained in hand-written form in many locations. So again, it would be awkward, though possible, to use the lists merely as a basis for building a sample frame of addresses or households.

Because of these drawbacks, KIIS has for several years pioneered the effort to adapt Western area-sample techniques to the situation in the Ukraine. In doing so, it has of course had to work around the lack of certain statistics that are routinely available in the United States, such as block or census tract statistics.

Here is the general outline of our approach. We use settlements as primary sample unit's (PSU's) and use probability, proportional to the size to select it. Then we select randomly postal districts in every selected settlement. Addresses or individual dwellings constitute the next sampling units. The boundaries of postal districts are well defined, and nobody knows the nooks and crannies in a postal district better than letter carriers. Hence, we escape the objection of using questionable lists and the need to seek inaccessible data.

On the territory of each postal district we randomly select streets, houses and apartments. After that we conduct a survey itself - selection and questioning of the respondents (we use special procedure - see below - to avoid bias in respondent selection). If after selection of the respondent it turns out that the respondent is not at home, the interviewer will make up 2 call-backs in order to find the respondent at home.

2.1.2.3. Sample size

Since the target sample size is 4000, following Western practice, we would draw a larger sample (about 4200) in anticipation of modest non-response. We do not employ the common practice in the NIS of substituting households with characteristics similar to those who fail to participate for some reason. The most important procedure is to keep selection random to avoid bias. This requires repeated call-backs to interview difficult-to-reach households whose work

lives may well differ systematically from those who are easily reached. Even if one knows the attributes of difficult-to-reach households, substituting an easy-to-reach household on the basis of size and structure accomplishes nothing salutary if that new household tends to differ from the difficult-to-reach household by virtue of the fact that the new household is easier to reach. Besides interviewer himself is interested in increasing of part of the households which took part in the interviews, as he is paid only for the interviews actually conducted. Information about the portion of households been interviewed makes possible to estimate the sample mistake more exactly (in case of substitution this mistake is camouflaged by the easy-to-get households and causes an uncontrolled shift in answers).

2.1.2.4. First stage of the sample – settlement selection.

Ukraine is divided into 24 oblasts and the Crimea. One city in each of these 25 administrative entities is designated as the o*blast centre*. Further, each of the 25 administrative entities is divided into *raions*, rather like counties in the United States and Britain.[2]

In principle, a national sample need not contain households from every oblast. However, our sample is in effect stratified by oblast. More precisely, the sample is drawn in such a fashion that every oblast is *proportionally* represented. This increases the cost of fieldwork because it requires that we maintain a staff in all oblasts, but it greatly enhances our ability to characterise regions, not just the country as a whole.

All households in each oblast are officially considered to live in one of three kinds of populated areas: cities, "villages of the city type" (PGTs), and villages. The designation correlates largely with size; however, it ultimately refers to the type of municipal administration granted to the settlement. Thus, it turns out that a few PGTs are larger than some small cities; and some villages are larger than some PGTs.

In official statistics, the rural population consists only of villages; the urban population is defined as comprising all cities and PGTs. The sample is stratified according to whether population points are considered urban or rural. The urban and rural populations of each oblast are represented proportionally.

We select PSU, using PPS (probability, proportional to the size).

We can draw samples very quickly because we have computerised the procedure. We developed our own software for sample design. For the same reason, it is quite easy for us to change the parameters of the sample to meet special needs.

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[2]To avoid repeatedly writing "the 24 oblasts and the Crimea", we shall use the term "oblasts" henceforth to refer to all 25 administrative entities. Strictly speaking, however, the Crimea in not an oblast, and referring to it as such would be considered a political *faux pas* by many.

2.1.2.5. Stratification of households on administrative-territorial units of Ukraine and inside them on urban and rural population.

Statistic grounding of the way of stratification on the number of population is based on the following positions:

Existing statistics in Ukraine does not allow to directly evaluate the quotes of households for the necessary categories of population. Existing statistics allows to represent the general aggregate in terms of different categories of families. Family statistics allows to assert that the number of families on each territorial-administrative category of population with the precision up to statistic significance is proportional to the total number of population within this category. It means that for the evaluation of strata it is possible to use the total number of population of stratified category, and not the number of households which the given category includes.

It should be noted that this polling confirmed the correctness of chosen approach for quoting households.

2.1.2.6. Second stage of the sample – selection of postal districts

Within each PSU, a list of residential postal districts is constructed. Sometimes this can be done centrally; at other times, a fieldworker must consult local authorities to construct the necessary list in a given PSU. Once the list is constructed a few postal districts are chosen randomly taking into account the number of residential routes, which is proportional to the number of apartments. The number of postal units selected depends on the size of the ultimate clusters that we want.

2.1.2.7. Third stage– households selection

Once the postal districts are selected, a rule for designating the first household is developed which randomly selects a carrier route (if there is more than one), a street on the route, a building on the street, and an apartment in that building. From this first apartment, the interviewer should interview each following household, but not more than 10 households.

2.1.3. Sampling development for street survey of "visible" businesses.

Populated areas and post-offices (postal districts) for this type of survey were selected only for urban population of Ukraine similar to procedure of selection of populated areas and postal districts for households' survey. Furthermore, on the territory of each postal district the first 30 "visible" firms situated on the interviewer route were fixed (see rules of interviewer route unwrapping in more details in SUPPLEMENT). The list of firms obtained in such a way due to random procedure of selection is the representative sampling of "visible" enterprises situated in Ukrainian cities.

The next step of selection was the purposeful selection of firms with the least number of employed from lists of enterprises, which had already been compiled. The small firms made the greatest interest in this part of research, as we would not be able to obtain a reliable information on the activity of non-registered enterprises from any of two other directions of research. In research of firms on the basis of State Committee for Statistics sampling only registered

enterprises were questioned; in research of households the share of people who sincerely gave answers about such activity didn't reflect the real degree of non-registered enterprises prevalence. In the countryside the questioning on random sampling was not held as in the majority of Ukrainian settlements the number of enterprises is not sufficient for filling each PSU (Primary Sampling Units).

2.2. Evaluation of sampling quality.

In total, the datafile contains the results of 5546 interviews with subjects of business (entrepreneurship) - 3904 interviews with the managers of enterprises registered in Ukraine selected on the basis of State Committee for Statistics data, 646 interviews with self-employed household members, and 996 interviews with the managers of enterprises selected by the route way in the streets of Ukrainian cities and towns. Chapter 4 of this report gives details of problems of sampling realisation. In the current chapter we'd like to dwell upon the evaluation of quality of realised sampling, basing mainly on the comparison of distributions of different characteristics of aggregate received in the framework of this survey research with existing statistic data on corresponding characteristics of general population.

2.2.1. Address sampling of registered enterprises.

The theoretical evaluation of quality of sampling presented to KIIS by the State Committee of Ukraine for Statistics can be obtained by means of comparison of statistic data of enterprises distribution according to spheres of their activity (on database - 250000) with similar distribution of enterprises according to the data obtained during research. The most unambiguous characteristics according to which it is possible to evaluate the differences between general and sample population are the sphere of activity of enterprises. That's why only this characteristic will be used in this chapter (the form of enterprise ownership could not serve as such characteristic as the State Committee for Statistics used more than 50 codes of forms of ownership of enterprises which are impossible to be correlated with similar information obtained during the questioning).

Table 2.2.1 Comparison of distribution of data from Sate Committee for Statistics data base - 250 000 with data of research "Ukraine MSE Survey" according to spheres of activity of enterprises inside each group of employment size

Spheres of activity	Employment size 1-10, %			Employment size 11-50, %			Employment size 51-250, %			Employment size 251 and more, %		
	Database	Data of survey	**Difference**	Database	Data of survey	**Difference**	Database	Data of survey	**Difference**	Database	Data of survey	**Difference**
Construction	9.7	6.2	**-3.5**	15	12	**-3**	22.1	25.2	**3.1**	11.3	11.1	**-0.2**
Industry	13.5	9.3	**-4.2**	18	13.8	**-4.2**	30.7	22.6	**-8.1**	57.3	50.5	**-6.8**
Trade and public catering	52.8	42.4	**-10.4**	40.3	38.3	**-2**	19.6	18.2	**-1.4**	6.8	7.4	**0.6**
Transport and communication	1.4	3.3	**1.9**	2.2	3	**0.8**	6.3	6.7	**0.4**	10.7	12.6	**1.9**
Finances, credit, insurance, provision of pensions	1	2.5	**1.5**	1.9	1.3	**-0.6**	1.5	2.1	**0.6**	2.1	2	**-0.1**

Agriculture and forestry, storage	0.9	2.5	**1.6**	1.3	2.4	**1.1**	2.5	3.9	**1.4**	0.3	3.9	**3.6**
Housing-municipal management, material and technical supply, hotels, recreation	6.7	10.1	**3.4**	10.2	13.4	**3.2**	9.8	8.1	**-1.7**	5.7	6.4	**0.7**
Social and cultural services (education, health protection, etc.)	3.6	5.6	**2**	4.4	7.2	**2.8**	3	4.4	**1.4**	1.7	1	**-0.7**
Science and services of science	5.2	6.5	**1.3**	3.3	3.4	**0.1**	3.1	3.2	**0.1**	3.8	2.1	**-1.7**
Other business-services	3.3	4.2	**0.9**	1.2	0.8	**-0.4**	0.3	0.4	**0.1**	0	0	**0**
Other	1.8	7.0	**5.2**	2.1	4.1	**2**	1	4.9	**3.9**	0.3	2.9	**2.6**
Hard to say	-	0.4	**0.4**	-	0.3	**0.3**	-	0.2	**0.2**	-	0.1	**0.1**

As seen from table 2.2.1. the maximal discrepancy of research data with statistic data makes 10.4%. According to us, such discrepancy is dealt with shortage of interviews at the enterprises of the 1st group of employment (read about the reason of this shortage lower). It is worth noting that the trade enterprises with the number of employed less than 10 people are the least stable for today in Ukrainian market. So, to reduce the quantity of mistake the sampling for research of enterprises of such type has to be based on the information of the current year (sampling for this research corresponds to the situation of 1997). That's why the part of enterprises from the address sample does not exist for today, and the new enterprises which were created for this period had not been included into the Ministry for Statistics data base. This fact provoked such a level of a sampling error.

The shortage of large industrial enterprises (sampling error is 8.1% for the 3rd group of employment and 6.8% for the 4th group of employment is dealt with primary displacement of sampling for the enterprises of this group. As seen from table 2, sampling on 200 populated areas used in this research, covers in the 1st and the 2nd groups of employment more than 60% of enterprises of general population, when in the 3rd and 4th groups not more than 40% of all enterprises of corresponding size are concentrated in selected populated areas.

Òàble 2.2.2. Distribution of enterprises of each group of employment size on populated areas under research and other populated areas of Ukraine (statistic information on database 250000):

	Enterprises situated….	
	In 200 settlements under research, %	In other settlements that didn't get into sample, %
1-10 employees	71.70	28.30
11-50 employees	62.24	37.76
51-250 employees	38.92	61.08
251+ employees	33.25	66.75
TOTAL	62.44	37.56

Table 2.2.3 presents primary displacements of statistics of general population of enterprises from database 250000 compared with enterprises situated in 200 selected populated areas.

Òàble 2.2.3. Comparison of data distribution of database of State Committee for Statistics - 250000 on all settlements and on 200 settlements selected for research:

Spheres of activity	Employment size 1-10, %			Employment size 11-50, %			Employment size 51-250, %			Employment size 251 and more, %		
	All settlements	200 settlements	**Difference**	All settlements	200 settlements	**Difference**	All settlements	200 settlements	**Difference**	All settlements	200 settlements	**Difference**
Construction	9.7	9.6	**-0.1**	15	14.5	**-0.5**	22.1	26.1	**4**	11.3	13.6	**2.3**
Production types of everyday services to population	4.2	3.4	**-0.8**	4.8	4.2	**-0.6**	2.6	3	**0.4**	0.8	1	**0.2**
Geology and prospecting, geodesic and hydrometeorology services	0.2	0.1	**-0.1**	0.2	0.2	**0**	0.3	0.4	**0.1**	0.4	0.2	**-0.2**
Housing-municipal management	1.8	1.7	**-0.1**	3.6	3.5	**-0.1**	5	5.4	**0.4**	4	4.8	**0.8**
Joint commercial activity on ensuring functioning of the market	3.3	3.8	**0.5**	1.2	1.6	**0.4**	0.3	0.5	**0.2**	0	0	**0**
Storage	0.9	0.6	**-0.3**	1.3	0.7	**-0.6**	2.5	0.8	**-1.7**	0.3	0.2	**-0.1**
Information-computational services	1.2	1.5	**0.3**	0.6	0.9	**0.3**	0.3	0.5	**0.2**	0.1	0.2	**0.1**
Other types of activity of material and production sphere	1.3	1.5	**0.2**	1.9	2.1	**0.2**	1	1.6	**0.6**	0.3	0.3	**0**
Culture and art	0.9	0.9	**0**	1.5	1.4	**-0.1**	0.7	1.2	**0.5**	0.3	0.3	**0**
Ì àterial and technical supply and sale	0.7	0.7	**0**	1.8	1.4	**-0.4**	2.2	2.3	**0.1**	0.9	1.2	**0.3**
Education	0.5	0.5	**0**	0.9	1	**0.1**	0.8	1.3	**0.5**	0.3	0.3	**0**
Science and services of science	3.8	4.7	**0.9**	2.5	3.4	**0.9**	2.5	3.9	**1.4**	3.3	3.7	**0.4**
Î perations with real estate	0.5	0.5	**0**	0.2	0.2	**0**	0	0.1	**0.1**	0	0	**0**
Health protection, physical culture, and social welfare	2.2	2.3	**0.1**	2	1.8	**-0.2**	1.5	1.3	**-0.2**	1.1	0.7	**-0.4**
Industry	13.5	12.7	**-0.8**	18	15	**-3**	30.7	24	**-6.7**	57.3	51.9	**-5.4**
Òrade and public catering	52.8	52.8	**0**	40.3	40.7	**0.4**	19.6	19.6	**0**	6.8	6.7	**-0.1**
Òransport and communication	1.4	1.5	**0.1**	2.2	1.9	**-0.3**	6.3	5.6	**-0.7**	10.7	11.6	**0.9**
Finances, credit, insurance, provision of pensions	1	1.2	**0.2**	1.9	1.9	**0**	1.5	2.4	**0.9**	2.1	3.2	**1.1**

At the end we want to show the distribution of enterprises of general population (statistics from database - 250 000) according to their size. Sampling of this research was quoted according to this characteristics, but during the extrapolation the results of survey of registered enterprises on Ukrainian market in general we recommend to use the procedure of weighting data file with consideration of proportion of enterprises of each group of employment size.

Òàble 2.2.4. Distribution of enterprises of database - 250000 and enterprises interviewed during research according to their size.

	Statistic data		UKRAINE SME SURVEY, Register's sample		Difference, %
	Frequency	%	Frequency	%	
1-10 employees	98445	55.8	1178	30.2	-25.6
11-50 employees	42188	23.9	875	22.4	-1.5
51-250 employees	25619	14.5	912	23.4	8.9
251 employees and more	10269	5.8	939	24.1	18.3
TOTAL	176521	100.0	3904	100.0	

***Statistics on database-250000. All enterprises not to be interviewed (which do not operate in the market) are excluded from database.

2.2.2. Households sample.

For testing the quality of this sampling realisation we make the check of the data obtained in the survey research with the data of the State Committee for Statistics for 1998 (tables 2.2.6.-2.2.9.) and the data of all-Ukrainian population census of 1989 (table 2.2.5).

Òàble 2.2.5. Comparative characteristics of statistic data and households file: distribution of households according to size.

Size of the household	Statistic data 12.01.89, %	UKRAINE SME SURVEY, household's sample		Difference, %
		Frequency	%	
1 person	18.2	700	17,5	-0.7
2 persons	28.7	1083	27,1	**-1.6**
3 persons	22.1	842	21,0	-1.1
4 persons	19.7	810	20,2	0.5
5 persons	7.0	340	8,5	1.5
6 persons	2.8	159	4,0	1.2
7 persons	1.4	69	1.7	0.3
TOTAL	99.9	4002	100	

Òàble 2.2.6. Comparative characteristics of statistic data and individual data of survey research: distribution of Ukrainian population aged 15 and older according to sex:

Gender	Statistic data, 1998, %	UKRAINE SME SURVEY, Individual data for adults in the household		Difference, %
		Frequency	%	
Male	45.4	4348	44.4	-1
Female	54.6	5441	55.6	1
TOTAL	100.0	9789	100.0	

Òàble 2.2.7. Comparative characteristics of statistic and individual data of survey research: distribution of Ukrainian population aged 15 and older according to age:

Age	Statistic data, 1998, %	UKRAINE SME SURVEY, Individual data for adults in the household		Difference, %
		Frequency	%	
15-19 years old	9.0	749	7.7	-1.3
20-24 years old	8.9	796	8.1	-0.8
25-29 years old	8.4	733	7.5	-0.9
30-34 years old	8.4	784	8	-0.4
35-39 years old	9.7	863	8.8	-0.9
40-44 years old	9.1	894	9.1	0
45-49 years old	8.7	866	8.8	0.1
50-54 years old	5.5	688	7	1.5
55-59 years old	8.1	607	6.2	-1.9
60-64 years old	6.8	857	8.8	2
65-69 years old	6.3	613	6.3	0
70 years old and older	11.1	1339	13.7	**2.6**
TOTAL	100.0	9789	100.0	

Òàble 2.2.8. Comparative characteristics of statistic and individual data of survey research: distribution of Ukrainian population aged 15 and older according to the type of settlement

Type of the settlement	Statistic data, 1998, %	UKRAINE SME SURVEY, Individual data for adults in the household		Difference, %
		Frequency	%	
City, town	68.1	9744	68.9	0.8
Village	31.9	3048	31.1	-0.8
TOTAL	100.0	9792	100	

Òàble 2.2.9. Comparative characteristics of statistic and individual data of survey research: distribution of Ukrainian population aged 15 and older by regions (oblasts).

Region	Statistic data, 1998, %	UKRAINE SME SURVEY, Individual data for adults in the household		Difference, %
		Frequency	%	
Crimea	5.1	473	4.8	-0.3
Kiev (city)	5.3	492	5.0	-0.3
Êiev oblast	3.7	385	3.9	0.2
Vynnitsa	3.7	352	3.6	-0.1
Volyn	2.0	231	2.4	0.4
Dnepropetrovsk	7.5	685	7.0	-0.5
Donetsk	10.3	951	9.7	-0.6
Zhitomir	2.9	255	2.6	-0.3
Transcarpathian	2.4	331	3.4	1.0
Zaporozhie	4.1	332	3.4	-0.7
Ivano-Frankovsk	2.8	349	3.6	0.8
Kirovograd	2.4	194	2.0	-0.4
Lugansk	5.4	467	4.8	-0.6
L'vov	5.3	642	6.6	**1.3**
Nikolaev	2.6	230	2.3	-0.3
Î dessa	5.0	515	5.3	0.3
Poltava	3.4	354	3.6	0.2
Rovno	2.2	247	2.5	0.3
Sumy	2.8	274	2.8	0.0
Ternopol	2.3	250	2.6	0.3
Kharkov	6.1	545	5.6	-0.5
Kherson	2.4	232	2.4	0.0
Khmelnitskiy	2.9	301	3.1	0.2
Cherkassy	2.9	245	2.5	-0.4
Chernovtsy	1.8	200	2.0	0.2
Chernigov	2.7	260	2.7	0.0
TOTAL	100	9792	100.2	

As seen from presented tables, maximal error of households sample makes: for distribution according to the households size - 1.6%, sex - 1%, age - 2.6%, type of populated area - 0.8%, and oblasts - 1.3%. Thus it is possible to suggest that the error in household sample in this survey research does not exceed 2.6%.

3. INTERVIEWERS TRAINING

3.1. The structure of interviewers network

KIIS has the all-Ukrainian network of interviewers consisting of 27 brigades situated in 24 oblasts of Ukraine and the Crimea. Coordination of field work on places is made by team leaders of interviewers groups, general management - by the coordinator of interviewers network in Kiev.

Besides, network of field control, which does not cross with the interviewers network is also within the KIIS structure. Among the tasks of field control network is monitoring the interviewers job by way of recurrent attending a selected number of addresses where the polling was held.

Teams of interviewers are mainly situated in oblast centres of Ukraine, they hold polls not only in their city, but also in all populated areas of the given oblast.

In total, the network of interviewers accounts for more than 300 interviewers - their quantity varied depending on the scale of survey research. Practically all of them participated in this research.

3.2. Interviewers training

The following scheme of training was used in this survey research:

1) Centralised training of representatives of oblast interviewers teams in 4 regional centres (Centre, East, South, West) by KIIS instructors.

2) Local training of each oblast interviewers by team leader and/or another team representative who was trained in a regional centre.

Training in each regional centre was held during 2 days, local training - during 1 day.

In total, the stage of training interviewers started in May, 13 with training the Kiev group of interviewers and finished in May, 29 with training teams from the Southern oblasts of Ukraine (See the Chart of training in SUPPLEMENT).

Training consisted of several stages:

Stage 1. Theoretical training.

1. Summary of the main rules of holding an interview.

2. Discussion of specific character of the given research.

3. Rules of selecting respondents for the 3 types of sampling for the given research.

4. Discussion of terminology for the given research (questionnaire of the given research contains a number of economical terms that are not typical for sociological surveys).

5. Discussion of questions from the questionnaire and rules of its filling.

6. Rules of filling other KIIS documents.

II stage. Independent work.

Filling trial questionnaires and writing final test (including assignments on checking knowledge of general rules of holding the interview and rules of filling a questionnaire for given survey research) by interviewers at the end of training.

III stage. Check of trial questionnaires and tests.

Discussion with instructor of correct answers and typical mistakes of interviewers during the fulfilment of independent assignment.

It is also worth noting that on holding polling according to address sampling, the team leaders of many oblasts enlarged their groups of interviewers, as the size of work at this stage was higher then we primarily supposed. Team leaders independently trained new interviewers, tested them, but they didn't send their tests to the KIIS.

At the large stage of training the instructors checked 200 tests, which makes 70% of the total number of interviewers participating in training. Only 3 interviewers were not admitted for participation in survey research after the check. Maximal number of mistakes made by the interviewers in testing - 10%.

4. FIELD WORK: PROBLEMS OF INTERVIEWERS IN WORK WITH QUESTIONNAIRES.

Field stage in households and “street” business polling was held in March 29 - May 4.

Field stage in polling enterprises according to the lists of State Committee for Statistics was held in April 4 - June 8. In April 29,7% of necessary number of interviews were collected (46.3% of

total number of interviews held), in May - 35.5% of necessary number of interviews (46% of total numbers of interviews held), in June-July - 6% of necessary number of interviews (8% of interviews held).

4.1. Making field stage of research on address sampling:

The problems, which occurred during the polling of enterprises on addresses of State Committee of Ukraine for Statistics, were primarily connected with the fact that a lot of enterprises didn't exist on given addresses. Thus, the search for enterprises and holding the polling needed the attraction of additional number of interviewers and delayed the terms of field works.

Table 4.1.1. gives statistics of the field stage of given type of research:

Table 4.1.1.

		1-10 employees	11-50 employees	51-250 employees	251+ employees	TOTAL
1.	Number of enterprises in the lists (main list, additional etc.)	5593	2802	2791	2814	14000
2.	Number of the checked addresses	4766	1862	1779	1709	10116
2.1.	Enterprise should not be interviewed	354	46	75	77	552
2.2.	Not existed enterprises	2610	560	336	164	3670
2.3.	Found enterprises	1802	1256	1368	1468	5894
2.3.1.	Number of completed interviews	1187	895	934	961	3977
3.	request to interviewers for number of completed interviews	2000	1000	1000	1000	5000
	RESPONSE RATE (share of completed interviews from all found enterprises)	**65.9**	**71.3**	**68.3**	**65.5**	**67.5**
	Share of non-taken interviews in checked lists	75.1	51.9	47.5	43.8	60.7

As seen from the table, the biggest share of non-taken interviews falls on the list of enterprises of the 1st group of employment, the smallest - on the 4th group. The next table presents the reasons of not taking interview:

Table 4.1.2.

		1-10 employees	11-50 employees	51-250 employees	251+ employees	TOTAL
1	Enterprise should not be interview	9.89%	4.76%	8.88%	10.29%	8.99%
2	Not existed enterprise	72.93%	57.91%	39.76%	21.93%	59.78%
3	Refused enterprise	17.18%	37.33%	51.36%	67.78%	31.23%

Thus, during the field stage of research 3977 questionnaires were collected. In final data file there are 3904 interviews, 73 questionnaires were rejected on the following reasons:

- 66 questionnaires on Kharkov were collected above the planned quantity.
- 1 questionnaire is rejected at the stage of coding information because of a large share of Non-Answers.
- 6 questionnaires are moved off the data file on field control results.

4.2. Making field works of households polling

The task for sampling included 202 populated areas - 91 cities, 26 city-type settlements, 85 villages.

The total number of households which participated in survey research was 4008. 929 households were selected for polling but didn't take part in it. The reasons of non-participants of households in polling were the following:

1) Absence from home of one of household members during 3 visits of an interviewer - 481 households (51.7%).

2) Refusal to open the door for an interviewer - 113 households (12.2%).

3) Refusal from participation in polling after the explanation by an interviewer of the purpose of his visit - 178 households (19.2%).

4) Another reason of interview failure - 157 households (16.8%).

Thus, the share of household which answered the polling questions made 81.2%.

In total, in 4008 households live 9792 persons aged 15 and older. According to the filled household registers 5320 persons of this total number are not employed for the moment of polling. Of them 13.3% are pupils and students, 8.9% are engaged in household economy, 55,8% are pensioners, 19.4% are unemployed, and 2.7% are not employed because of another reason.

Of 4472 employed household members 172 persons combine work on hire and self-employment, 3813 have a work on hire, and 831 persons are self-employed (of them 172 persons combine both activities). Of all persons to be polled were not questioned: working on hire - 546 persons, self-employed - 185 persons.

The reasons of non-participation of household members in polling distributed in the following way:

Table 4.2.1.

	Workers on hire		Self-employed	
	N	%	N	%
Another household member working at the same enterprise is questioned	255	46.6	70	37.6
Refusal from participation in an interview (the register is filled from words of another household member)	40	7.4	37	20.1
Long-term absence of the respondent	188	34.4	46	24.8
The respondent is ill	23	4.2	5	2.7
Broken interview	0	0.0	2	1.3
Another reason	40	7.4	25	13.4
TOTAL	546	100	185	99.9

So, the share of household members who gave answers is calculated in the following way:

1) as the first reason of non-participation in polling is that the given respondent didn't have to be questioned at all, the number of interviews held had to make 3558+761=3629.

2) as in 4008 households 3629 interviews had to be made, in 929 non-questioned households there must be held correspondingly 841 interviews.

3) So, the total number of potential respondents made 3629+841=4470 persons. Of them questioned – 3267+646=3913 persons. Thus, the share of those who gave answers is: 3913*100% / 4470 = **87.5%**

Nevertheless it is worth noting that the given indicator is sooner of formal (declarative) nature - in real terms the number of respondents is much lower. Unfortunately, we will not be able to evaluate the real response rate, as we do not know the share of household members under survey, who did not give a sincere answer about their activity. We can only assume that a certain part of respondents concealed that they are engaged in entrepreneurship.

4.3. Holding field works on random sampling

Street polling of "visible" businesses was held in 82 populated areas, of them: in 25 oblast centres, 43 other cities (towns), and in 14 urban-type communities (UTC). In total, during the field stage 991 interviews with subjects of entrepreneurship were collected. As the number of "visible" enterprises on the territory postal districts research is different, and in some territories there are no such enterprises at all, the number of collected interviews is a little bit lower, then it was planned - 991 instead of 1000.

Besides the interviews, the information on 3026 randomly selected "visible" enterprises is collected in this research.

Òàble 4.3.1. Distribution of "visible" enterprises according to the number of employed in representative sampling (N=3026) and among polled enterprises (N=991)

Number of employed	All "visible" enterprises		All interviewed enterprises	
	Frequency	%	Frequency	%
1 employed	1256	41.5	583	58.8
2-10 employed	1431	47.3	338	34.1
11-5- employed	259	8.6	58	5.9
51-250 employed	41	1.4	10	1.0
251 and more employed	18	.6	2	.2
Refused to answer	20	.6	0	0
TOTAL	3026	100.0	991	100.0

Among the enterprises selected by the interviewers for polling 491 enterprises refused from participating in the interview.

Besides 991 collected questionnaires, 5 questionnaires were added to the data file from household sampling. These questionnaires were obtained under unwrapping of polling chain in the places of households dwelling. 5 addresses selected for polling were the addresses of offices, and not households.

Problems in holding such type of survey:

Among the respondents who answered the questionnaire questions there were many people engaged in individual commercial activity. Among these people there were many pensioners, who had to trade in the street in order to make both ends meet. It was rather difficult for these people to answer some questions from questionnaire, as these questions were sooner designed for enterprises and were difficult for understanding to ordinary old women who do not consider themselves entrepreneurs. Answer "Hard to say" is often met in such questionnaires.

5. FIELD CONTROL

Monitoring of KIIS polling network interviewers work is executed in several directions:

- quality control for making sampling (unwrapping polling network, developmental work on addresses in case of address sampling, etc.)
- monitoring the fact of holding an interview
- quality control for holding an interview.

Tool for quality control of polling chain unwrapping in KIIS standard sampling is the interviewer's diary. At this stage the team leaders checked on spot (in the provinces) the correctness of filling the diary, and also the correctness of building chain for selection of

households and the route of selecting “visible” enterprises for street polling. After passing the questionnaires and interviewers diaries to Kiev the majority of diaries was checked, and if there were any doubts the questionnaires of the given questioning chain were put on control. During the field monitoring of address sampling both - the enterprises where the questioning was held, and the addresses where the questioning was not held (quality control of addresses check - whether the reasons of not taking interview were valid) were controlled.

In this research field control was held in all oblasts of Ukraine. Practically all interviewers who took part in polling were controlled. The share of interviews which ha to be controlled makes 10% of the total number.

The tool for controlling the fact and quality of polling was the specially developed inspector questionnaire.

In household polling 441 households participating in polling from 15 oblasts of Ukraine were controlled. In 6 households the violations of selecting rules were observed, and all questionnaires of these households were removed from data file.

Numbers of questionnaires of these households:

À) Registers of households employment - ¹ ¹ 2424, 2725, 2727, 2733, 2826, 3515.

B)

In street polling 10 polling chains in different oblasts of Ukraine were controlled. In these chains 297 enterprises introduced into the route map of businesses (representative list of enterprises) and 100 enterprises that were polled by questionnaire were recorded (fixed). All information on 10 polling chains was confirmed completely, no violations were observed.

In address sampling of enterprises 350 enterprises participating in questioning and situated in all oblasts of Ukraine were controlled on subject of fact and quality of polling holding. The fact of polling was not confirmed at 6 enterprises (N 4209, 4987, 4988, 4993, 5015, 5020), the questionnaires of which were removed from data file. 153 enterprises of those, which could not be found by interviewers on a given address, were checked. This control showed that the results of address check were not falsified - there are no such enterprises on given addresses.

6. PREPARING DATA FILE ON ELECTRONIC COMPUTER

Coding and editing of questionnaires was held in following directions:

- registration of obtained questionnaires, giving them unique codes (numeration), coding sampling characteristics - oblasts (spheres) of polling, populated area (codes of settlements are given in SUPPLEMENT), check of correctness of filling chapters for interviewers, in other words - features, information of which can be compared with or reconstructed by interviewers' diaries;

- check of correctness of questionnaires' filling: observing transitions correct understanding of the polling logic, analysis of interviewers' mistakes.

8 coders participated in coding and editing questionnaires; a team of operators of 10 persons did input of questionnaires.

7. LOGICAL CONTROL

Logical control of the data quality is a computer program, which checks co-ordination of respondents' answers to certain questions of the questionnaire. For example, if the enterprise has the state form of ownership, its director can't be the owner of this enterprise (coordination of questions A5 and A7), etc.

In total, more than 200 logical conditions were formulated in the logical control program, and about 30% of questionnaires were checked.

At each stage of control on formulated logical conditions the questionnaires, which seemed suspicious about possible mistakes in them were selected. Hard copy of each questionnaire was checked and in case of necessity corrections were introduced into the questionnaire and data file.

Besides, the control of outlays of quantitative variables (e.g., deviating values of working day duration, etc.) was held.

8. WHAT INCLUDES THE ELECTRONIC ARCHIVES (FILES) OF RESEARCH DATA:

A. Household Survey

1. ***Data file "ROSTER.SAV" – data from the roster of the Household's Employment***

2. ***Data file "HIRED.SAV" - data about enterprises , where household's members are hired employees***

3. ***Data file "SELF.SAV" - data about activity of self-employed household's members***

B. Street Survey

4. ***Data file "RANDOM.SAV" – data about smallest street enterprises***

5. ***Data file "ROUT.SAV" - data about employment of all street enterprises***

C. Register Survey

6. ***Data file "ADDRESS.SAV" – data about registered enterprises from GosComStat's lists***

And Combined data file "COMBINED.SAV"

APPENDIX B

KIEV INTERNATIONAL INSTITUTE OF SOCIOLOGY

Types of selection:
selection of households 1
random selection 2
address selection..... 3

1) FOR SELECTION OF HOUSEHOLD:

Chain number:

Number of the household in the chain:

Number of the respondents in the household:

2) FOR RENDOM (ROUT) SELECTION:

Number of the rout list:

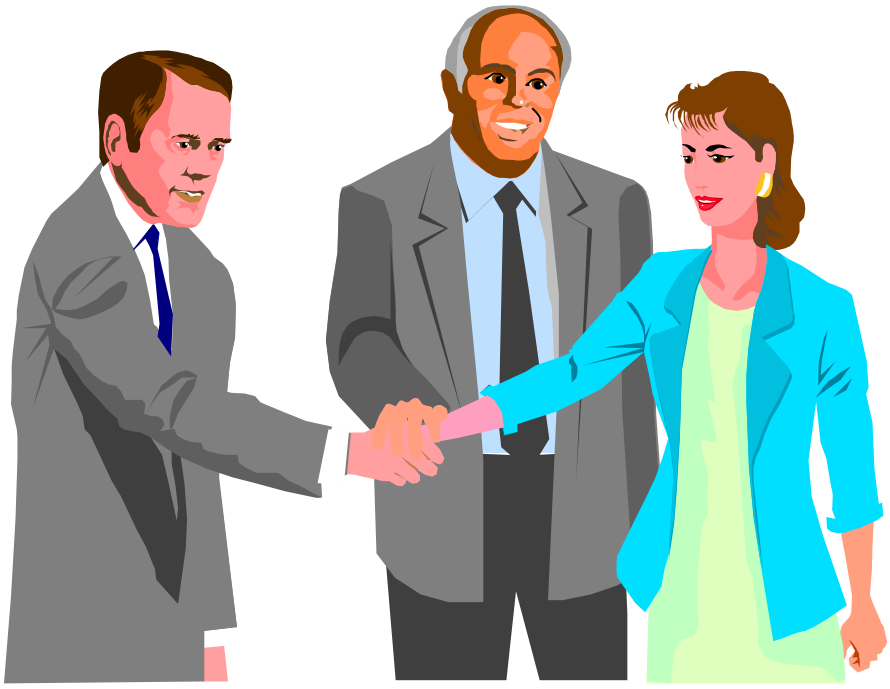
Number of the enterprise in the rout list:

FOR ADDRESS (REGISTER) SELECTION, PLEASE RECORD

code of the enterprise in the register:

BUSINESS IN UKRAINE

Sociological questionnaire for managers, employers and self-employed



Kiev, 1999

À0. STARTING TIME OF THE INTERVIEW: _____H._____M.

Part A.

[HERE AND FORTH EVERYTHING IN ITALIC SHALL BE USED ONLY FOR INTERVIEWING SELF-EMPLOYED] ***I would like to discuss your business activity in more detailed.*** *(FOR INTERVIEWING HOUSEHOLD REFIRE TO THE INFROMATION FROM THE REGISTER)*

If you undertake several types of business activity let us discuss one which took most of your time for the last 30 days.

À1. Name of the enterprise?

PLEASE RECORD THE ENTERPRISE NAME
IF THE RESPONDENT IS SELF-EMPLOYED - WORK OUT OF ANY ENTERPRISE OR ORGANISATION - RECORD HIS /HER NAME AND ***SKIP TO A7***

À2. Does your company have any other name used for its business?

Yes ……1 ➔ **Another name of the enterprise:**
No …….2

À3. How many people are owners of this business?

1 person 1
2-3 people 2
4-5 people 3
More then 5 people 4
Other 5 (State owned, etc.) 5
HS/DK 7
Refused 9

À4. Who is the manager of the business?

NAME OF THE MANAGER

À5. Is this person hired or is he an owner / a co-owner?

Is hired 1
Is an owner 2
Is one of several owners 3
HS/DK 7
Refused 9

À6. Is 51 % or more of the business owned by a woman (women)?

Yes 1
No 2
HS/DK 7
Refused 9

À7. What is the ownership form of your enterprise *(business):*

SHOW CARD À7

Private, owned by physical persons 1
Collective / Joint-Stock with 25%-50% held by the state 2
Collective / Joint-Stock with over 50% held by the state 3
Collective / Joint-Sock with the majority held by private or juridical persons 4
Joint venture where the majority belongs to private or juridical persons 5
Joint venture where the majority belongs to the state (Ukraine) 6
State-owned 7
Individual commercial activity ..... 8 ➔**A14**
Other types of ownership, List 9
HS/DK 97
Refused 99

À8. Did your enterprise have a different ownership form before?

Yes 1
No ..... 2➔A10
HS/DK ..... 7➔A10
Refused ..... 9➔A10

À9. Which ownership form did it have?

SHOW CARD A9

Private enterprise 1
Collective / Joint-stock 2
Joint venture 3
State-owned 4
Other types of ownership _____ 5
HS/DK 7

À10. Your Enterprise…

...is a newly created firm 1
...has separated from a continuing but larger state-owned enterprise 2
...was privatized form an entire state-owned enterprise 3
...has separated from an enterprise of a different ownership form 4
HS/DK **7**

À11. Did any part of your current enterprise ever separate into another independent firm?

Yes ..... 1 ➔ **À11à.When?**
No 2
HS/DK 7
Refused 9

Month:_____
HS/DK…0
Year:*19*_____
HS/DK…0

À12. Does your enterprise have subsidiaries or other companies where it owns over 50% of the equity?

Yes ..... 1 ➔ **À12à.How many firms?**
No 2
HS/DK 7

HS/DK...0

À13. Does a different (holding) enterprise own more then 50% of the equity of your enterprise?

Yes.....1
No 2
HS/DK.....7

À14. Principal type of activity of your enterprise(*business):* [select the one bringing the largest income?]

PLEASE RECORD A PRODUCT OR A SERVICE PRODUCED BY THIS ENTERPRISE. IF THERE ARE SEVERAL SPECIALIZATIONS PLEASE RECORD THE ONE ,WHICH GENERATES THE LARGEST INCOME

À15. Principal sphere of activity of your enterprise (*business):*
SHOW CARD A15

THE ANSWER TO THIS QUESTION HAS TO CORRESPOND THE ANSWER TO THE QUESTION A14.

Construction [examples and listings will be provided to the interviewers as part of their training.] 1
Manufacturing, Mining 2
Agriculture and Forestry 3
Transportation and Communication 4
Wholesale or Retail Trade 5
Eating and Drinking Places 6
Domestic services, hotels, recreation 7
Social and cultural services (health care, education, culture fine arts, etc.) 8
Finance, Insurance, or Real Estate 9
Consulting services (advertisement, marketing, consulting) 10
Other business services (employment etc.) 11
Other _____ 12
HS/DK 97

Part B.

Â1. Number of Employees (Full or part-time)?
DON`T SHOW THE SCALE TO THE RESPONDENT

Number of employees:

PLEASE RECORD THE ANSWER IN THE ICON AND CODE IT BY THE SCALE
From 1 to 5 1
From 6 to 10 2
From 11 to 50 3
From 51 to 250..... 4
Over 250..... 5
HS/DK 7

Â2. How many of them are employed…

(IF THERE ARE NO FULL OR PART TIME EMPLOYED RECORD" 0")

…part time
(less then a norm accepted at your enterprise)

HS/DK…0.1

...full time
(according to a norm accepted at your enterprise)

HS/DK…0.1

Â3. **How many <u>hours per week</u> on average at your enterprise *(in your business)* is...**

…part time employment *hours per week*

HS/DK…0.1

...full time employment *hours per week*

HS/DK…0.1

Â4. **What is the number of women among all employed at your enterprise *(business)*?**

NUMBER OF WOMEN

%

HS/DK…0.1

Â5. **Are there any members of immediate families of owners and managers or relatives working in the firm?**

Yes..... 1
No ..... 2 ➔Â7
HS/DK ..... 7 ➔Â7
Refused ..... 9 ➔Â7

Â6. **Are these family members compensated for their work?**

Yes..... 1
No..... 2
HS/DK 7
Refused 9

Â7. **In the past 6 months has the number of workers:**

…decreased 1
…increased 2
…same? 3 ➔ Â10

➔ **Â7à On how many persons ?**

HS/DK..... 7

HS/DK...0

Â8. ASK THIS QUESTION IF THE ANSWER TO THE QUESTION B7 WAS 1(THE NUMBER OF EMPLOYEES HAS DECREASED). IN OTHER CASES - SKIP TO B10.

If the number of employees decreased, did you fire some employees? (at least in one case)?

Yes..... 1
No..... 2 ➔Â10
HS/DK..... 7 ➔Â10
Refused..... 9 ➔Â10

Â9. **How many people were fired?**

HS/DK…0

Â10. **How many days does the procedure of firing normally takes at your firm?**

HS/DK…0

Â11. **Did you put any employees on extended unpaid layoff ?**

Yes ..... 1 ➔ Â11à. **How many employees?**

No..... 2
HS/DK 7

HS/DK.....0

Part C

Ñ1. Year enterprise (*your business)* started under present ownership?

month: [ ] HS/DK.....0 year: [19] HS/DK.....0

Ñ2. Is your enterprise (*your activity*) officially registered?

Yes.....1
No.....2
HS/DK 7
Refused 9

Ñ3. Is it necessary to obtain a license (licenses) from government agencies or bureaus for the operation of your enterprise (*business*)?

Yes.....1 ➔ Ñ3à. **How many licenses you need?** [ ] HS/DK...0
No.....2
ÒÑ/ ÍÇ ...7

Ñ4 Please look at the list of public agencies that are related to the procedure of registration and to the process of licensing and keeping the activity of an enterprise (*business*) under the control.
GIVE THE CARD WITH THE LIST OF AGENCIES AND ASK THE FOLLOWING QUESTIONS. PLEASE RECORD AGENCIES INSPECTED THE ENTERPRISE /BUSINESS IN THE FIRST COLUMN OF THE TABLE

Ñ4à. How many times was your business inspected by each of these agencies during the last 6 months?

Ñ4b. What proportion of the time did each of these agencies find violations resulting in fines or other administrative penalties?

C4 Name of Agency	C4a Number of Times Inspected in Last 6 months	C4b Proportion of Time When Violation Found
1. Tax Agency		
2. Fire Department		
3. Police Department		
4. Sanitary-Epidemic Station		
5. Ministry of Environment		
6. Committee of Standardization, Certification, and Metrology		
7. Consumer Protection Committee		
8. Anti-Monopoly Committee		
9. Department of Architecture		
10. Other Agency (Specify)		
11.DIDN`T INSPECT BY ANY AGENCIES		

*IF RESPONDENT IS SELF-EMPLOYED (THE ANSWER 8 IN THE QUESTION A7)– SKIP TO **D2***

Ñ5. Have your business prepared or conducted any of the activities listed here for its own use?

		yes…….no……HS/DK
À.	**Prepared a written detailed business plan**	1……2……..3
B.	**Prepared a request for financing**	1……2……..3
C.	**Conducted formal market research**	1……2……..3
D.	**Prepared a written marketing plan**	1……2……..3
E.	**Worked with a business consultant**	1……2……..3

Ñ6. Has your firm received assistance from an assistance program in the form of:

		äà……íåò……HS/DK
À.	**Management Training Programs?**	1……2……..3
B.	**Business Consulting?**	1……2……..3
C.	**C. Assistance in obtaining credit/loans?**	1……2……..3

Ñ7. IF "YES" TO ONE OF **C6**, ASK THE FOLLOWING C7.IN OTHER CASES - SKIP TO THE QUESTION **C8**

Do you remember the name of the program which provided the assistance?

PROGRAM/PROJECT NAME HS/DK…0

PROGRAM SPONSOR HS/DK…0

Ñ8. Do you belong to one or more of the following organizations:

		äà……íåò……HS/DK
À.	**Local Chamber of Commerce**	1……2……..3
B.	**Industry Association**	1……2……..3
C.	**Trade Association**	1……2……..3
D.	**Union of entrepreneurs of Ukraine**	1……2……..3
E.	**Other (**SPESIFY**)**	1……2……..3

Part D

D1. What % of your products / services is purchased by government agencies through so-called "state contracts"

None 1
1-5 percent 2
6-10 percent.....3
11-50 percent4.....4
More than 50 percent 5
HS/DK.....7

D2. W hat percent of your enterprise's (*business's*) raw materials, supplies and equipment are obtained through barter?

Zero percent 1
1-10 percent.....2
11-40 percent.....3
41-70 percent.....4
more than 70 percent 5
HS/DK.....7

D3. What percent of your sales are bartered rather than cash receipts?

Zero percent 1
1-10 percent.....2
11-40 percent.....3
41-70 percent.....4
more than 70 percent 5
HS/DK.....7

D4. What percent of your payroll is paid in kind?

Zero percent 1
1-10 percent.....2
11-40 percent.....3
41-70 percent.....4
more than 70 percent 5
NO EMPLOYEES…..…….. 6➔**D6**
HS/DK……..……7

D5. How many months is your payroll in arrears?

Current (zero months).....1
1 – 3 months.....2
4 – 6 months.....3
6 – 12 months.....4
Over 12 months 5
HS/DK.....7

D6. What part of your enterprise's (*your*) product or services is exported outside the Ukraine?

Zero percent…… …1➔**D8**
1-10 percent.....2
11-30 percent.....3
31-70 percent.....4
more than 70 percent 5
HS/DK 7

D7. If you have exports, what percent of exports is to Russia and other CIS states?

Zero percent 1
1-10 percent.....2
11-20 percent.....3
31-70 percent.....4
more than 70 percent 5
HS/DK….. 7

D8. What is the single..... problem facing your enterprise (*business*) today.

SHOW CARD D8
WITH ALLOWABLE RESPONSES, NOT MORE THEN 1 IN EACH COLUMN

	…most important	…next most important
Existing tax system	1	1
Administrative controls by public agencies	2	2
Legislative conditions	3	3
Inflation	4	4
Obtaining credit	5	5
Interest rates - (the charges by banks or other lenders for loans to the business)	6	6
Shortages of raw materials / inputs	7	7
Lack of working capital	8	8
Labor availability and cost	9	9
Availability of other necessary resources	10	10
Low market prices for my products	11	11
Inadequate equipment	12	12
Lack of marketing plan and advertisement campaign organization	13	13
Lack of demand for goods and services produced (needs discussion)	14	14
Other _____	15	15
HS/DK	97	97

D9. During the last 6 months what were your gross sales or revenues for the entire period?

WRITE THE EXACT ANSWER IN THE ICON AND CODE IT BY THE SCALE. IF THE RESPONDENT DOES NOT GIVE THE EXACT ANSWER SHOW THE CARD D9.

uah

Under 500 UAH 1
501-1,000 UAH 2
1,001-2,000 UAH 3
2,001-5,000 UAH 4
5,001-10,000 UAH 5
10,001-25,000 UAH 6
25,001-50,000 UAH 7
50,001-100,000 UAH 8
100,001-500,000 UAH 9
500,001 and more 10
HS/DK 97
Refused 99

D10. During the last six months has your sales volume <u>IN HRIVNAS</u> become:

SHOW CARD D10.

More than 100% Lower 1
Between 31%-100% Lower 2
Between 16%-30% Lower 3
Between 1%-15% Lower 4
About the same 5
Between 1%-15% Higher 6
Between 16%-30% Higher 7
Between 31%-100% Higher 8
More than 100% higher 9
HS/DK ..... 97 ➔D12
Refused ..... 99 ➔D12

D11. **What do you think is the major reason for sales for your enterprise to...**

(CHOOSE AN ANSWER SELECTED IN THE PREVIOUS QUESTION)?

SHOW CARD D11.

Inflation	1	1
Changes in economic conditions	2	2
Change in sales prospects for my products or services	3	3
Changes in interest rates and credit availability	4	4
Changes of average sales prices	5	5
Changes of prices for raw materials & inputs	6	6
Change of regulatory environment (inspections, regulated prices, administrative interference)	7	7
Changes in the political environment	8	8
Usual seasonal changes	9	9
Other	10	10
HS/DK	11	11

D12. **Do you think that your business sales will change in the next six months?**

SHOW CARD D12

Will go down substantially	1
Will go down slightly	2
Will remain the same	3 ➔D13
Will go up a little	4
Will go up substantially	5
HS/DK	7 ➔D13

D11b. **What do you think is the major reason for sales for your enterprise to...**
(CHOOSE AN ANSWER SELECTED IN THE PREVIOUS QUESTION D12)
SHOW CARD D11. ANSWER TO THIS QUESTION RECORD IN THE COLUMN **D11b** IN THE SCALE TO THE QUESTION D11.

D13. **Do you think that GENERAL business conditions six months from now will be better or worse?**

SHOW CARD D13.

Much better	1
Somewhat better	2
About the same	3
Somewhat worse	4
Much worse	5
ÒÑ/ ÍÇ	7

D14. **During the last six months has the average net profit of your enterprise (*business*) IN HRIVNAS become:**

SHOW CARD D14.

More than 100% Lower	1
Between 31%-100% Lower	2
Between 16%-30% Lower	3
Between 1%-15% Lower	4
About the same	5
Between 1%-15% Higher	6
Between 16%-30% Highe	7
Between 31%-100% Higher	8
More than 100% higher	9
HS/DK	97➔D16
Refused	99➔D16

D15. **If higher or lower, what are the most important reasons? Respondent may list up to three. Hand the respondent a response card with the following entries:**

(CALL THE ANSWER CHOOSED BY THE RESPONDENT TO THE PREVIOUS QUESTION)?

SHOW CARD D15

Changes of the market conjuncture (between demand and supply) 1
Inflation 2
Change of the volume of sales 3
Change of the average sales price of products 4
Changes of prices for raw materials & inputs 5
Change of labor cost 6
Change of regulatory environment (inspections, regulated prices, administrative interference) 7
Level of taxation 8
Changes in expenses (rental, depreciation) 9
Usual seasonal changes 10
Other 11
HS/DK 12

D16. **What do you expect to happen to the volume of production the goods or services that your enterprises (*business*) will produce during the next six months?**

SHOW CARD D16

Decrease Significantly 1
Decrease Somewhat 2
Stay about the Same 3
Increase Somewhat 4
Increase Significantly 5
HS/DK 7

D17. **How are your average selling prices <u>IN HRIVNAS</u> for your goods or services today compared to six months ago?**

SHOW CARD D17

More than 100% Lower 1
Between 31%-100% Lower 2
Between 16%-30% Lower 3
Between 1%-15% Lower 4
About the same 5
Between 1%-15% Higher 6
Between 16%-30% Higher 7
Between 31%-100% Higher 8
More than 100% higher 9
HS/DK 97
Refused 99

D18. **Are loans easier or harder to get than they were six months ago?**

SHOW CARD D18

They were not available then and are not available now ... 1
Harder to Get Now 2
The Difficulty of Getting Them is About the Same Now as it was Six Months Ago 3
It is easier to get loans now 4
HS/DK 7

D19. **Did you attempt to borrow money for your business within the last six months?**

Yes 1
No ..... 2 → D21
HS/DK ..... 7 → D21

D20. **If Yes, was your enterprise (you) successful?**

Yes 1
No 2
HS/DK 7

D21. **During the last year has your firm made any capital expenditures to improve or purchase equipment, buildings or land.?**

Yes 1
No..... 2 ➔D24
HS/DK..... 7 ➔D24

D22. **What sort of expenditures and whether the items were purchased (title and ownership acquired) or leased (rented without acquisition of ownership and title)**

SHOW CARD D22.	**…Purchased**	**…Leased**
Production premises and structures	1	1
Vehicles	2	2
Equipment	3	3
Fixtures, Furniture	4	4
Land	5	5
Improvements to existing buildings	6	
HS/DK	7	6

D23. ASK THIS QUESTION IF THE ENTERPRISE HAS PURCHASED SOMETHING (ANSWERS 1-5 IN THE COLUMN 1 TO THE QUESTION D22)

What was the total cost of the purchasing…(CALL THE SORT OF EXPENDITURES FROM THE PREVIOUS QUESTION D22) ? WRITE THE EXACT ANSWER AND CODE IT BY THE SCALE. IF THE RESPONDENT DOES NOT GIVE THE EXACT ANSWER SHOW CARD D23.

uah

Under 500 UAH.....1
501-1,000 UAH.....2
1,001-2,000 UAH.....3
2,001-5,000 UAH.....4
5,001-10,000 UAH.....5
10,001-25,000 UAH.....6
25,001-50,000 UAH.....7
50,001-100,000 UAH.....8
100,001-500,000 UAH 9
500,001 and more.....10
HS/DK.....97
Refused.....99

D24. **Do your suppliers**

…demand cash payment .....1➔D26
…extend credit.....2
SOME REQUIR CASH SOME EXTEND CREDIT.....3
WE DON`T WORK WITH SUPPLIERS .....4➔D28
HS/DK.....7

D25. **If your suppliers extend credit, under what terms?**

SHOW CARD D25
SEVERAL ANSWERS ARE POSSIBLE

By providing goods on consignment until sold 1
By providing goods with no payment due for 30 days (one month) 2
By providing goods with no payment due for 31-60 days (two months) 3
By providing goods with no payment due for 61-90 days (three months) 4
By providing a discount (lower price) for payment within 10 days, but allowing 30 days for payment 5
HS/DK..... 6

D26. **Your enterprise (you) buys all goods from…**

single source 1
multiple sources .....2➔ D28
HS/DK.....7➔ D28

D27. **Why does your enterprise work only with one supplier?**

SHOW CARD D27

SEVERAL ANSWERS ARE POSSIBLE

Believe that you have a variety of potential suppliers, but you choose one supplier because
that is most convenient 1
Purchase from one supplier because
here is only one supplier in the marketplace 2
When working with multiple suppliers there is
a growing risk of violence, extortion of money, etc 3
Other reasons..... 4
HS/DK..... 5

D28. **Is your enterprise doing retail trade?**

Yes.....1
No.....2 ➔
HS/DK .....7 ➔
Refused .....9 ➔
ÐART Å

D29. **If you are a seller of goods in a public market place, do you pay rent for the space (and/or facilities such as a kiosk) you occupy ?**

Yes.....1
No 2
HS/DK.....7
Refused 9
➔ ÐART Å

D30. **If yes, to whom do you pay the rent or leasing fees?**

SHOW CARD D30
SEVERAL ANSWERS ARE POSSIBLE

Municipal or Rayon authorities 1
Individuals who own or control space to be rented.....2
An enterprise or private person in whose territory your trading place is located (marketplace, store ,etc.)..... 3
A state-owned enterprise / organization.....4
Other 5
HS/DK.....6
Refused.....7

D31. **How would you describe the impact of your rental payment for your retail location?**

SHOW CARD 31

It is a minor cost, which I can easily pay..... 1
It is a significant cost, but I can pay it without much difficulty 2
It is a significant cost, and it is a real burden to sell enough to be able to pay it..... 3
HS/DK 7

Part E.

And now I would ask You to remember (<u>NOT TO NAME</u>) an entrepreneur whom you know better then others. This can be a man or a women, yourself or a neighbor, a fired or a relative, it does not matter. It is only important that you have in mind <u>the same person</u> when answering the following questions. When asking about this person I will cal him/her an ENTERPRENEUR.

E1. Do you have such a person in mind?

Yes 1
No.....2➔ Å13

Å2. Number of Employees in this ENTERPRENEUR?

SHOW CARD E2

Just myself 1
From 1 to 5.....2
From 6 to 10.....3
From 11 to 50.....4
From 51 to 250.....5
Over 250 6
HS/DK.....7

E3. When economic conditions in the country are hard, entrepreneurs are often forced to find a way out by underreporting his/her activities, establishment of informal relations with public officials and to use other similar techniques. For development of a program of economic crisis one has to estimate the scale of such a phenomena in general. Tell me please whether you have ever heard about such techniques of business activity?

Yes..... 1
No..... 2 ➔Å13
Refused... 3 ➔Å13

E4. Tell me please, does the ENTREPRENEUR you have in mind undertake a...

…registered business 1
…non-registered business..... 2➔Å7
HS/DK..... 7 ➔Å7

E5. What do you think, what per cent of total taxes are really paid by the ENTERPRENEUR you have in mind?

	%

HS/DK…0

E6. ASK THIS QUESTION IF THE ANSWER TO THE PREVIOUS ONE IS LESS THEN 100% OR "REFUSED". OTHERWISE – SKIP TO **E7**

Which of these ways to evade taxation (SHOW THE CARD **E6**) **are used by this entrepreneur?**

SEVERAL ANSWERS ARE POSSIBLE

Gets part of his revenues in cash 1
Gets part of his revenues to an unregistered account in a foreign bank 2
Registers revenues with people who have privileges in taxation..... 3
Deducts expenses for the items that envisage a smaller tax rate..... 4
Registers firms in an off-shore zone abroad or in a free economic zone in the territory of Ukraine 5
HS/DK 6
Refused 7

E7. What do you think, what percentage of total official taxes such an ENTERPRENEUR could have paid without a serious damage to his business?

	%

HS/DK…0

E8. In such conditions that are faced by this ENTERPRENEUR, is it possible to do business without establishing informal relations with authorities?

Yes..... 1 ➔Å10
No..... 2
HS/DK 7

E9. Officials of what agencies are most important to have informal relations with?

SHOW CARD E7

NOT MORE THEN THREE ANSWERS POSSIBLE

Ministries, other central state executive agencies 1
President's administration 2
Verkhovna Rada 3
State owned or semi-state owned banks 4
Sate TV 5
Oblast authorities 6
Municipal authorities 7
Rayon authorities, local self-governance 8
Customs 9
Tax inspection 10
Prosecutor's office 11
Police 12
Other 13
HS/DK 14
Refused 15

E10. Does the ENTERPRENEUR have to give out a part of his profit to representatives of any of public agencies. If yes, what part of profit?

IF THE ANSWER IS NEGATIVE, WRITE "0"

	%

HS/DK…0.1

E11. Does this ENTERPRENEUR have to give out a part of his profit to representatives of any of unofficial force groups (racket, etc.)If yes, what percentage?

IF THE ANSWER IS NEGATIVE, WRITE "0"

	%

HS/DK…0.1

E12. With what rate of total taxes an ENTERPRENEUR like this one would have paid them fully?

	%

HS/DK…0

Å13à. Mail address of the enterprise:

POSTAL CODE
OBLAST
MUNICIPALITY
STREET AND BUILDING NUMBER
APARTMENT, OFFICE NUMBER

Å13b. Contact phones:

AREA CODE
TELEPHONE OF THE MANAGEROF THE ENTERPRISES
OTHER CONTACT PHONES

Å14. TIME OF COMPLETION OF THE INTERVIEW _____MINUTES_____

Part F. Questions to the Interviewer

F1. DATE OF THE INTERVIEW:

DATE: «____» MONTH: 3 - March; 4 - April; 5 - May

F2.DURATION OF THE INTERVIEW IN MINUTES:_____minutes.

F3. PLEASE RECORD THE NAMES AND POSITIONS OF MANAGERS AND EMPLOYEES WHO WERE ANSWERING QUESTIONS:

1. _____

2. _____

3. _____

F4. TO WHAT EXTENT THE RESPONDENTS WERE SINCERE WHEN ANSWERING QUESTIONS:

1. Absolutely sincerely
2. Rather sincerely
3. Sometimes sincerely, and sometimes - not
4. Fully insincerely

F5. OBLAST WHERE THE INTERVIEW WAS CONDUCTED

Crimea	1	Zaporizhzhya	10	Sumy	19
Kiev City	2	Ivano-Frankivsk	11	Ternopil	20
Kiev oblast	3	Kirovograd	12	Kharkiv	21
Vinnitsa	4	Lugansk	13	Kherson	22
Volyn	5	L:viv	14	Khmelnitskiy	23
Dniepropetrovsk	6	Nikolayev	15	Cherkassy	24
Donetsk	7	Odessa	16	Chernovtsi	25
Zhitomir	8	Poltava	17	Chernigiv	26
Tanscarpathean	9	Rivne	18		

F6. DISTRICT (RAYON) OF THE INTERVIEW: _____

F7. MUNICIPALITY WHERE THE INTERVIEW WAS CONDUCTED:_____

F8. TYPE AND SISE OF THE MUNICIPALITY

Village	1
Settlement	2
town of 200 thousand residents	3
town from 200 to 500 thousand residents	4
town of at least 500 thousand residents	5

INTERVIEWER, READ THE FOLOWING STATEMENT AND SIGN IT:

I hereby confirm that the interview was conducted according to the instruction by the method of personal interview with a respondent selected according to the Instruction:

F9. INTERVIEWER'S NAME, FAMINILY NAME: _____

SIGNATURE:_____

F10. NAME OF THE TEAM LEADER:_____

F11. CODE OF THE ENCODER
F12. CODE OF THE OPERETOR

THANK YOU DEAR COLLEAGUES!

Kiev International Institute of Sociology

APPENDIX C

DISTRIBUTION OF FIRMS IN FIVE SECTIONS OF UKRAINE

As indicated in the *Methodological Report* in Appendix A, the household survey sample was drawn proportionally to the population of the Ukraine. The percent of the sample in each of the five regions closely matches the population in each of these regions. Each region sample can be projected to regional totals using the ratio of the population of the region to the number of interviews performed in that region. Table C-1 is based on the answers of householders who claimed employment.

Table C-1. Employment in Five Regions of The Ukraine, by Employment Size Class

Region	Zero Employees	1-50 Employees	51-250 Employees	Over 250 Employees	Totals
Western	605,439	896,186	899,606	632,803	3,034,034
West-Central	431,120	1,001,592	857,885	931,916	3,222,512
East-Central	331,602	765,236	735,477	829,006	2,661,321
Eastern	276,855	685,328	689,867	1,275,346	2,927,396
Southern	777,906	922,940	615,293	650,453	2,966,592
Totals	2,422,921	4,271,282	3,798,128	4,319,523	14,811,855

This table shows over 5,000,000 less employees than tables 1-1, 2-1, and 2-2 of the main report. The difference is due largely to the difference in the firms with over 250 employees. This difference and the basis for its use will be discussed in Appendix D. The slight reduction in the number of employees in the other employee size groups is within normal error limits and is largely due to the fact that regional and industrial projection required responses more specific to industry and region than the more general tables mentioned above. The distribution of employment on a percentage basis for each of the size classes is given in table C-2.

Table C-2. Percentage Employment in Five Regions of The Ukraine, by Employment Size Class

Region	Zero Employees	1-50 Employees	51-250 Employees	Over 250 Employees	Totals
Western	20.0	29.5	29.7	20.9	100%
West-Central	13.4	31.1	26.6	28.9	100%
East-Central	12.5	28.8	27.6	31.2	100%
Eastern	9.5	23.4	23.6	43.6	100%
Southern	26.2	31.1	20.7	21.9	100%
All Regions	16.4	28.8	25.6	29.2	100%

The employment in firms of 250 employees or less is over 70 percent of all employees in firms selling a good or service in the marketplace.. This compares to the just under 54% reported in Table 1-3.

The sample of firm interviews from the registry sample yielded an average of 11.89 employees in firms of 1-50 employees, 125.05 employees in firms of 51-250 employees and 905.84 employees in firms with more than 250 employees. Using these averages, the number of firms of each size class in each region is calculated and presented in table C-3.

Table C-3. Projected Number of Enterprises in Five Regions of The Ukraine, by Employment Size Class

Region	Zero Employees	1-50 Employees	51-250 Employees	Over 250 Employees	Totals
Western	605,439	76,373	7,194	699	688,705
West-Central	431,120	84,238	6,860	1,029	523,247
East-Central	331,602	64,360	5,881	915	402,758
Eastern	276,855	57,631	5,473	1,408	341,367
Southern	277,906	77,623	4,920	718	861,168
All Regions	2,422,922	359,226	30,629	4,769	2,817,245

The registry sample from the State Committee of Statistics listed 10,851 firms with over 250 employees. This higher number was used to estimate firms and employment in the body of this report. The household worker sample revealed less than half as many firms of that size. From the *Methodological Report* it can be seen that over 20 percent of the registry firms in this employment size class could not be located. More important is that fact that the Committee was unable to distinguish between firms operating in the marketplace and other entities (including farming operations) that were not included in this survey. The percent distribution of firms by size across the five regions is given in table C-4.

Table C-4. Percent of Firms by Employment Size Class and by Region of The Ukraine

Region	Zero Employees	1-50 Employees	51-250 Employees	Over 250 Employees	Regional Share
Western	25.0	21.0	23.7	14.7	24.52
West-Central	17.8	23.4	22.6	21.6	18.6
East-Central	13.7	17.9	19.4	19.2	14.3
Eastern	11.4	16.0	18.1	29.5	12.1
Southern	32.1	21.6	16.2	15.1	30.6
All Regions	100%	100%	100%	100%	100%

The largest firms are predominant in the Eastern Region and the smallest firms are a larger percentage of enterprises in the Southern, Western, and West-Central regions.

EMPLOYMENT BY INDUSTRY IN EACH OF THE FIVE REGIONS

The Regional industry and employment size projections developed in this section of the Appendix should be used with caution. Because the projections are based solely on population distribution, the projections will not exactly match the projections developed in Section 1 and Section 2 of the main report which are based on distributions from both the household and registry samples. In some industries the number of observations in the sample are too small to provide a viable base for projection. In some industries including Agriculture and Forestry and Social and Cultural Services, it appears that household members reporting employment in non-profit or quasi-governmental entities were included in the sample survey. These records should have been edited and removed, since the survey was intended to cover only entities selling goods and services in the marketplace. Some reported government employment has been isolated in a Public Sector Administration category which is found in each of the Regional Tables. This category was included as a subset of "Other" industries and employment in the main body of the Report.

WESTERN REGION

The projected employment by industry is based on the ratio of the total population to the size of the sample of interviews. The Western Region is composed of the following oblasts:

Volyn
Rovno
L'vov
Ivano-Frankovsk
Ternopol
Transcarpathian
Chernovtsy

Projected employment by industry in the Western Region is given in table C-5.

Table C-5. Projected Employment by Industry and Employment Size Class – Western Region

	Firm Size				
Industry	**Zero Employees**	**150 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	75,252	37,626	51,308	3,421	167,6074
Mining & Manufacturing	10,262	47,888	133,402	212,075	406,626
Agriculture and Forestry	58,149	75,252	212,075	157,346	502,822
Transport & Communications	27,364	102,617	47,888	71,832	249,701

Wholesale & Retail Trade	314,691	119,719	23,944	10,262	468,616
Eating & Drinking Places	3,421	37,626	6,841	6,641	54,729
Domestic Services, Hotels, Recreation	37,626	85,814	64,991	10,262	198,392
Social & Cultural Services	27,364	280,486	280,486	133,402	721,738
Finance, Insurance & Real Estate	6,841	13,682	10,262	----	30,738
Consulting & Scientific Services	6,841	13,682	6,841	6,841	34,206
Other Business Services	6,841	----	6,841	----	13,682
Public Sector Administration	----	51,308	27,364	10,262	88,934
Other	30,875	30,785	27,364	10,262	98,196
Totals	605,439	896,186	899,606	682,303	3,034,034

In reading the regional industry tables, caution should be exercised. These tables have projection factors between 3000 and 5000. That is, a cell with an entry of less than 10,000 employees may be the result of only 2 or 3 sample interviews. Since a single sample may have an error as a result of communication difficulties between the interviewer and the subject, the individual entries should not be given much weight unless the projected employment is above 100,000. The rows and columns may be scanned for patterns and in such scanning the decision may be based upon the overall impression of projected employment in the hundreds of thousands. In reading tables projected from sparse data there is no substitute for common sense. Table C-5 is converted to percent distribution of industry employment for each firm size group. These data are presented as table C-6.

Table C-6. Percent Employment, by Industry and Employment Size Class - Western Region

	Firm Size				
Industry	**Zero Employees**	**1-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	12.4	4.2	5.7	0.5	5.5
Mining & Manufacturing	1.7	5.3	14.8	33.5	13.3
Agriculture and Forestry	9.6	8.4	23.6	24.9	16.6
Transport & Communications	4.5	11.5	5.3	11.4	8.2
Wholesale & Retail					

Trade	52.0	13.4	2.7	1.6	15.5
Eating & Drinking Places	0.6	4.2	0.8	1.1	1.8
Domestic Services, Hotels, Recreation	6.2	9.5	7.2	1.6	8.5
Social & Cultural Services	4.5	31.3	31.2	21.1	23.8
Finance, Insurance & Real Estate	1.1	1.5	1.1	----	1.0
Consulting & Scientific Services	1.1	1.5	0.8	1.1	1.1
Other Business Services	1.1	----	0.8	----	0.5
Public Sector Administration	----	5.7	3.0	1.6	2.9
Other	5.1	3.4	3.0	1.6	3.3
Totals	100%	100%	100%	100%	100%

The allocation of employment was done by the interviewers. The results are not as might be wished. Only employment in firms offering goods or services in the marketplace was to be considered for inclusion in the survey. The original questionnaire had no space for "Public Sector Administration," or for other non-profit activity. Apparently the interviewers felt it necessary to record employment wherever it was encountered. As a result, an industry category for Public Sector Administration has been added in Table C-6. In the main body of the report, Public Sector Administration is combined with the "Other" category.

The replies "Social & Cultural Services" may have represented employees who were not in an industry offering goods or services in the marketplace, e.g., schools, orphanages, hospitals, etc. Despite intensive training, this type of difficulty is inevitable with several hundred interviewers working with a translation of a document where the English version contains unfamiliar terms. From the narrative material, this problem can be addressed specifically in any future survey. The predominance of Wholesale and Retail Trade among small enterprises and Manufacturing and Mining and Agriculture and Forestry (including lumber and logging) among the largest businesses is apparent. .

WEST-CENTRAL REGION

The West-Central Region is composed of the following oblasts:

Khmelnitskiy
Zhitomir
Kiev (city)
Kiev oblast
Cherkassy
Kirovograd

Vynnitsa.

Projected employment by industry for the West-Central Region is given in table C-7

Table C-7. Projected Employment by Industry and by Employment Size Class West-Central Region

	Firm Size				
Industry	**Zero Employees**	**1-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	34,838	52,257	26,128	21,174	134,997
Mining & Manufacturing	4,355	65,321	117,578	326,606	503,860
Agriculture and Forestry	4,355	82,740	82,740	209,028	409,346
Transport & Communications	26,128	104,514	78,385	74,031	283,059
Wholesale & Retail Trade	222,092	169,835	34,838	34,838	431,120
Eating & Drinking Places	8,709	43547	8,709	4,355	65,321
Domestic Services, Hotels, Recreation	34,838	91,450	82,740	17,419	226,447
Social & Cultural Services	26,128	261,285	269,994	182,899	740,307
Finance, Insurance & Real Estate	4,355	8,709	8,709	8,709	30,483
Consulting & Scientific Services	8,709	8,709	39,193	52,257	108,869
Other Business Services	21,774	13,064	----	----	34,838
Public Sector Administration	----	65,321	39,193	17,419	121,933
Other	34,838	47,902	39,193	13,064	134,997
Totals	431,120	1,001,592	857,855	931,916	3,222,512

Table C-7 is also converted to percent distribution of employment within each employment size group. These percents are presented as Table C-8.

Table C-8. Percent Employment, Firm Size by Industry – West-Central Region

	Firm Size				
Industry	**Zero Employees**	**1-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	8.1	5.2	3.1	2.3	4.2
Mining & Manufacturing	1.0	6.5	13.7	35.1	16.0
Agriculture and Forestry	1.1	8.3	13.2	22.4	12.7
Transport & Communications	6.06	10.4	9.1	7.9	8.8
Wholesale & Retail Trade	51.5	17.0	4.1	0.5	13.4
Eating & Drinking Places	2.0	4.4	1.0	0.5	2.0
Domestic Services, Hotels, Recreation	8.1	9.1	9.6	1.9	7.0
Social & Cultural Services	6.1	26.1	31.5	19.6	23.0
Finance, Insurance & Real Estate	1.0	0.9	1.0	0.9	1.0
Consulting & Scientific Services	2.0	0.9	4.6	5.6	3.4
Other Business Services	5.1	1.3	----	----	1.1
Public Sector Administration	----	6.5	4.6	1.9	3.8
Other	8.1	4.8	4.6	1.4	4.2
Totals	100%	100%	100%	100%	100%

The West-Central Region is not greatly different from the Western Region. Agribusiness is slightly more important especially among medium size firms. Social and cultural services remain as the largest industry. Further research is necessary to see how much of this industry is truly market-oriented.

EAST-CENTRAL REGION

The East-Central Region is composed of the following oblasts:

Chernigov
Sumy
Poltava
Dnepropetrovsk.

Projected employment by industry is given in table C-9.

Table C-9. Projected Employment by Industry and by Employment Size Class East-Central Region

	Firm Size				
Industry	**Zero Employees**	**1-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	38,202	29,759	68,021	34,010	170,052
Mining & Manufacturing	8,503	29,759	97,780	289,089	425,131
Agriculture and Forestry	55,267	42,513	93,529	174,304	365,613
Transport & Communications	4,251	68,021	89,278	102,031	263,581
Wholesale & Retail Trade	157,299	85,026	42,513	12,754	297,592
Eating & Drinking Places	----	34,010	8,503	4,251	46,764
Domestic Services, Hotels, Recreation	29,759	97,780	34,010	42,513	204,063
Social & Cultural Services	17,005	242,325	187,058	131,791	578,178
Finance, Insurance & Real Estate	4,251	17,005	29,759	4,251	55,297
Consulting & Scientific Services	----	8,503	----	4,251	12,754
Other Business Services	4,251	4,251	----	----	8,503
Public Sector Administration	----	59,518	42,513	17,005	119,037
Other	12,754	46,464	42,513	12,754	114,785
Totals	331,602	765,236	735,477	829,006	2,329,718

These data are converted to percents of firm size employment in table C-10.

Table C-10. Percent Employment, by Industry and Employment Size Class East-Central Region

	Firm Size				
Industry	**Zero Employees**	**1-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	11.5	3.9	9.3	4.1	6.4
Mining & Manufacturing	2.6	3.9	13.3	34.9	16.0
Agriculture and Forestry	16.7	5.6	12.7	21.0	13.7
Transport & Communications	1.3	8.9	12.1	12.3	9.9
Wholesale & Retail Trade	47.4	11.1	5.8	1.5	11.2
Eating & Drinking Places	----	4.4	1.2	0.5	1.8
Domestic Services, Hotels, Recreation	9.0	12.8	4.6	5.1	7.7
Social & Cultural Services	5.1	31.7	25.4	15.9	21.7
Finance, Insurance & Real Estate	1.3	2.2	2.2	0.5	2.1
Consulting & Scientific Services	----	1.1	----	0.5	0.5
Other Business Services	1.3	0.6	----	----	0.3
Public Sector Administration	----	7.8	5.8	2.1	4.5
Other	3.9	6.1	5.8	1.5	4.3
Totals	100%	100%	100%	100%	100%

An observation of such tables is the relative constancy of industry dominance by firm size. The largest firm size group dominates Mining and Manufacturing and the smaller size groups dominate Wholesale and Retail Trade. The persistence of "Social & Cultural Services" requires further exploration. Either these are non-market institutions or entertainment-related items have been removed from retail trade. It was the intent of the survey to use the International Standard Industry Classification System. This worked fairly well with the knowledgeable executives from larger firms in the interviews from the registry sample. The household survey interviewed workers who may have had a narrower perspective of the industry in which their firm was located. Some of the interviewed workers may not have understood that the firm had to sell a product or service in the market in order to be included in the survey.

EASTERN REGION

The Eastern region is composed of the following oblasts:

Kharkov
Donetsk
Lugansk.

Projected employment by industry is given in table C-11.

Table C-11. Projected Employment by Industry and Employment Size Class Eastern Region

	Firm Size				
Industry	**Zero Employees**	**1-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	18,154	13,616	45,386	40,847	118,004
Mining & Manufacturing	4,539	45,386	108,926	794,255	953,106
Agriculture and Forestry	27,232	36,309	54,463	90,772	208,776
Transport & Communications	13,616	68,079	54,463	77,156	213,314
Wholesale & Retail Trade	158,851	104,388	27,232	9,077	299,548
Eating & Drinking Places	----	36,309	18,154	27,232	81,965
Domestic Services, Hotels, Recreation	13,616	118,004	77,156	36,309	245,084
Social & Cultural Services	13,616	186,083	217,853	131,619	549,170
Finance, Insurance & Real Estate	----	27,232	13,616	9,077	49,925
Consulting & Scientific Services	9,077	4,539	----	9,077	22,693
Other Business Services	----	----	----	----	----
Public Sector Administration	----	22,693	45,386	36,309	104,388
Other	18,154	22,693	27,232	13,616	81,695
Totals	276,855	685,328	689,867	1,275,346	2,927,396

In reading these tables it may be noted that certain numbers appear frequently in different cells. This duplication of cell values is due to the fact that each sample observation is projected by a common factor. In the case of table C-11, the projection factor is 4,539. This number is the ratio of the population of Eastern Region to the number of householders interviewed. Each sample observation is multiplied by this factor. This causes repeated appearance of numbers such as 4,539 for a sample observation of one, and 9,077 for a sample observation of 2. Since numbers

of employees of less than 50,000 are based upon sample observations of 10 or less, caution should be used in interpreting these numbers. These data are presented as percent of firm size employment in table B-12.

Table C-12. Percent Employment, by Industry and Employment Size Class Eastern Region

	Firm Size				
Industry	**Zero Employees**	**1-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	6.6	2.0	6.6	3.2	4.0
Mining & Manufacturing	1.6	6.6	15.8	62.3	33.6
Agriculture and Forestry	9.8	5.3	7.9	7.1	7.1
Transport & Communications	4.9	9.9	7.9	6.1	7.3
Wholesale & Retail Trade	57.4	15.2	4.0	0.7	10.2
Eating & Drinking Places	----	5.3	2.6	2.1	2.8
Domestic Services, Hotels, Recreation	4.9	17.2	11.2	2.9	8.4
Social & Cultural Services	4.9	27.2	31.6	10.3	18.8
Finance, Insurance & Real Estate	----	4.0	2.0	0.7	1.7
Consulting & Scientific Services	3.3	0.7	----	0.7	0.8
Other Business Services	----	----	----	----	----
Public Sector Administration	----	3.3	6.6	2.9	3.6
Other	6.6	3.3	4.0	1.1	2.8
Totals	100%	100%	100%	100%	100%

The Eastern Region is noteworthy for the high concentration of employment in Mining and Manufacturing. This is noted especially in the largest employment size group of firms. A final note of warning: it must be remembered that many of the cell entries in the regional tables are based upon a very small number of interviews with very few persons. Any misunderstanding in the original interview is magnified several thousand times when the sample is projected to the population.

SOUTHERN REGION

The Southern Region is composed of the following oblasts:

Zaporozhie
Kherson
Nikolaev
Odessa
Crimea

Projected employment by industry and firm size for the Southern Region is given in Table C-13,

Table C-13. Projected Employment by Industry and Employment Size Class Southern Region

	Firm Size				
Industry	**Zero Employees**	**1-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	39,555	43,950	74,714	----	158,218
Mining & Manufacturing	8,790	48,344	74,714	246,117	377,966
Agriculture and Forestry	162,613	83,504	70,319	193,378	509,814
Transport & Communications	57,134	39,555	65,924	92,294	254,907
Wholesale & Retail Trade	276,882	136,243	30,765	----	443,890
Eating & Drinking Places	13,185	57,134	8,790	4,395	83,504
Domestic Services, Hotels, Recreation	87,889	114,269	48,344	21,975	272,487
Social & Cultural Services	57,134	268,092	167,008	70,319	562,554
Finance, Insurance & Real Estate	8,790	35,160	13,185	----	57,134
Consulting & Scientific Services	8,790	4,395	8,790	----	21,975
Other Business Services	----	4,395	----	----	4,395
Public Sector Administration	----	57,134	21,975	8,790	87,889
Other	57,134	30,765	30,765	8,790	127,454
Totals	777,908	922,940	615,293	646,058	2,962,197

The proportionately large numbers of employees in the two smallest employee size groups makes the Southern Region the leader among all regions in terms of relative employment in very small businesses. Agribusiness (food and fiber production, processing and distribution) among zero employee firms is the highest in the Southern Region. Over 78 percent of employment is in small and medium enterprises (SMEs), second only to the Western Region. These data are presented as percent of employment by firm size in Table C-14

Table C-14. Percent Employment, by Industry and Employment Size Class Southern Region

	Firm Size				
Industry	**Zero Employees**	**1-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**All Sizes Of Firms**
Construction	5.1	4.8	12.1	----	5.3
Mining & Manufacturing	1.1	5.2	12.1	38.1	12.8
Agriculture and Forestry	20.9	9.1	11.4	29.9	17.2
Transport & Communications	7.3	4.3	10.7	14.3	8.6
Wholesale & Retail Trade	35.6	14.8	5.0	----	15.0
Eating & Drinking Places	1.7	6.2	1.4	0.7	2.8
Domestic Services, Hotels, Recreation	11.3	12.4	7.9	3.4	9.2
Social & Cultural Services	7.3	29.1	27.1	10.9	19.0
Finance, Insurance & Real Estate	1.1	3.8	2.1	----	1.9
Consulting & Scientific Services	1.1	0.5	1.4	----	0.7
Other Business Services	----	0.5	----	----	0.2
Public Sector Administration	----	6.2	3.6	1.4	3.0
Other	7.3	3.3	5.0	1.4	4.3
Totals	100%	100%	100%	100%	100%

The Southern Region joins the Western Region as the two regions where Agricultural and Forestry related industries surpass Mining and Manufacturing as the dominant market-oriented industry of the region. The high incidence of Social & Cultural employment is present throughout all regions and is probably due to the interviewer's lack of understanding as to what was a market-oriented business. Translation of the text from the interviewers worksheet will be

necessary to track the incidence of both social and cultural services and the reasons why the Public Administration industry was created by interviewers.

APPENDIX D

SOURCES AND USES OF THE DATA

INTRODUCTION

The initial sample design called for a list of firms stratified by firm size. The sample was to be taken from a state registry or from registries maintained at oblast or rayon level. Because these data would represent only registered firms, a household sample was desired to supplement the government sources in order to measure the informal or unregistered portion of industry in the Ukraine. The term "industry" is used in this report to represent any enterprise selling or bartering goods and/or services in the marketplace. The reliance on the government registry was due to the need to stratify the sample by firm size. Stratification is necessary to obtain a representative number of the largest firms. Such firms would occur with a very low frequency in a purely random sample. Adequate representation of firms in each size class would be necessary to characterize the differences between the large and the small firms. Five thousand interviews were planned: one thousand in each of five different size classes: zero employees (owner only), 1-10 employees, 11-50 employees, 51-250 employees, and over 250 employees)

The household sample would be completely random. In the interest of costs, some clustering around randomly selected starting points would be permitted, but no cluster was to be larger than 10 households (0.025% of the total sample). The sample would be drawn in proportion to the population in each region and from the majority of the postal districts. The population in the household would be used to develop projection factors based upon the ratio of the total population to the number of householders. The household survey would be necessary to locate those entrepreneurs too new to the market or too small to be included in a government registry or those firms of any size that were deliberately not registering their activity with the government. Measurement of unregistered or informal market activity was a major goal of the study. A survey of four thousand households was planned for this part of the study.

Due to the interest in small firm characteristics and because the smallest firms are found in street trade, a small street sample was planned. This would permit the ability to characterize the operating characteristics in small firm sales and services that could be observed along the street or in the marketplace or similar commercial areas. Because this sample was not tied to any official registry, or in proportion to any specific population measure, the results would not be used for any national or regional projected measures. The data would be used to enrich our knowledge of the operating characteristics of the smallest enterprises.

THE REGISTRY SAMPLE

After interviews with several government offices it was determined that the best available single list of firms in the Ukraine was that of the Committee of Statistics. Since these were firms that were registered with some level of government, this list is referred to as the "register". Tax authorities in the individual oblasts were reported to have registered approximately 800,000 firms. Because larger firms might have separate establishments within or across one or more

oblasts, the actual total for the Ukraine might not be the simple sum of the regional measures. As a result it was decided to use a central register such as that of the Committee of Statistics.

The marketing personnel at the Committee of Statistics reported that their file contained 600,000 records of individual firms. While this was less than the 800,000 previously reported, this difference could be the combination of establishments into their parent enterprises. To ascertain the viability of the registry a summary by firm size was requested before entering into any agreement.

The results of this advance summary called for a change in sample design. Instead of the 600,000 firms originally cited, only 203,168 firms could be sorted according to employment size. The results of this advance computer run were:

Employment Size of Firm	**Number of Firms**
Zero	10,288
1-10	110,370
11-50	44,098
51-250	27,561
Over 250	10.851
Total	203,168

These numbers would be useless for national projections. Our knowledge of market economies elsewhere in Eastern Europe and in the West indicated that there should be some millions of firms with 10 or fewer employees. While we could draw a sample of firms for interviews from the registry, we could not use the registry count of total firms to project national totals. We would have to use the household sample for estimates of employment in smaller firms and for identification of entrepreneurs with smaller enterprises. The registry sample could still be used for firms of employment size over 250. The decision on whether to use the registry sample for the 51-250 employee size group would depend upon the results of the household survey. The relationships between the different size groups form a common pattern in virtually every economy. This pattern would help to determine whether the household or the registry sample would be used to project the 51-250 employment sample size group to national totals.

The registry sample was important for much more than projection of national totals. The sample could be stratified by firm size. If we relied on a purely random sample, we would get very few firms in the largest size group. If the count of 10,851 largest firms was correct, a random sample of 5,000 firms from the registry would yield only 267 firms to be interviewed in that size class. This would give inadequate coverage of industry and region. The goal of the sample was to achieve 1,000 interviews in each of the size classes listed above. Because names and addresses would be supplied, the interviewers could locate specific firms and ask for a company spokesperson for the interview. The many questions about employment, economic outlook, history of ownership, and company performance could not be expected to be obtained from an employee in a household interview. A senior executive in the larger firm could be expected to be knowledgeable about these areas, however.

The inaccuracy observed in the registry data is to be expected. The State Committee for Statistics in the Ukraine has had only a few years to establish a database of market-oriented companies. Statistical experts familiar with problems of firm measurement in other countries can state unequivocally that such a database is difficult and expensive to maintain. Even the best public and private databases in the West have noticeable errors at any given time. As an example of this difficulty, a newly formed cohort of firms in the United States. has a half life expectancy of 38 months. The rate of discontinuance is estimated at 20% per year, compounded. Such rapid change is characteristic of dynamic markets as industry responds to new technologies, new methods of distribution, and changing tastes and preferences. To allow for obsolete entries in the registry database the sample drawn from the registry had to be much larger than our target of 1,000 for each employment size group. The Zero and the 1-10 group were combined for a target of 2,000 completed interviews. Table D-1 illustrates the problem and is drawn from the information in Tables 2.2.4 and 4.1.1 of Appendix A, the *Methodological Report.*

Table D-1. Experience with the Registry Sample

	Size of Firm				
Item	**Zero-10 Employees**	**11-50 Employees**	**51-250 Employees**	**Over 250 Employees**	**Totals**
A. Final Registry Count	98,455	42,188	25,619	10,269	176,521
B. Delivered Sample	5,593	2,802	2,791	2,814	14,000
C. Assigned to Interviewers	4,766	1,862	1,779	1,709	10,116
D. Non-Existent Enterprises	2,610	560	336	164	3,670
E. Completed Interviews	1,187	895	934	961	3,977
F. Targeted Number	2,000	1,000	1,000	1,000	5,000
G. = (C – D)/C = Percent Good in Sample	45.2	69.9	81.1	90.4	67.0

Less than half of the records in the smallest size group represented existing companies. The three larger firm size groups were increasingly better. For the whole sample, however only two out of three firms in the registry could be found. Research in Western economies has measured the increased stability of firms as size increases. The higher proportion of firms found in the larger size firm size categories from the registry show this to be true of the Ukraine as well.

The registry count is noticeably lower in these final sample searches than the 203,168. When the computer search asked for industry as well as firm size, the number of "hits" was reduced to 176,251, a reduction of over 13 percent. The smallest group lost the most records and the largest group the fewest.

THE HOUSEHOLD SAMPLE

Based upon an original plan for a sample of 10,000 interviews and with 5,000 planned for the registry sample, the remainder of 5,000 interviews was considered for household and street interviews. Because the street interviews could not be used for national or regional projections 4,000 interviews were scheduled for the household survey and only 1,000 for the street survey. The household survey was divided proportionally to the population in each of the 24 oblasts, Kiev City, and the autonomous region of Crimea an grouped into five regions as described in Table 2.2.9 of Appendix A *Methodological Report*. The population measure chosen was population age 15 and over, a measure of potential entrants to the workforce.

The household sample was necessary not only for verification of the registry sample in the smaller size groups, but also to locate nascent entrepreneurs and employment in firms not entered in the registry. Altogether 4,002 households were visited with interviews of 9,789 persons age 15 or over. Some of the interviews were for an absentee household member through a fellow householder as spokesperson. Of these 9,789 potential workers, 3904 reported that they were employed in an industry supplying goods or services in markets. An additional 646 household member reported ownership of a firm as entrepreneurs.

The household sample was centered in some 200 postal districts. Random geographic locations were chosen for starting points and a cluster sample not exceeding 10 households was taken around that specific geographic point. By limiting cluster size to a maximum of 10 households, adequate geographic dispersion of the 4,000 households was assured. Such limited clustering was undertaken to hold down field costs. National and regional projections were made in proportion to the ratio of the population to the sample size. Regional projections were made only from the household sample, while national projections were made from a combination of household and registry sample as described in the next section.

THE STREET SAMPLE

It was anticipated that the majority of small firms would be in the Wholesale and Retail Trade industry. The registry sample did not cover very small firms well. The household sample would interview mostly employees rather than managers. To get manager perspective to the problems and outlook for small business a small street sample was designed. Because the sample was not tied to population or to the registry and because an adequate random sample would be expensive, an area sample was designed. The interviewers would start at a hundred or more random locations, enumerate up to 30 businesses at each location and interview up to ten businesses immediately adjacent to the randomly selected location. Location selection was limited to areas of commercial activity.

The street sample is not analyzed in this report, since this report focuses on analysis of businesses across all industry types, using a sample that can serve as the base for national and regional projections.

PROJECTION OF SAMPLE RESUILTS TO NATIONAL AND REGIONAL TOTALS

The projection of sample results to regional totals is covered in Appendix C. Because industry totals were desired, only the household sample could be used. Future work should incorporate computer sorting of records from the registry file to correct the projected totals in the largest size class. The registry file has not been analyzed for regional observations by industry and size class and was unavailable for this purpose. For the present, the regional projections from the household sample are reasonably accurate for all except the over 250 employee size class.

The reasons for the failure of the household sample to adequately measure employment in the largest size class could be due to several factors. It is possible that household member employees misjudged the size of their employing firm. This could be due to the fact that they worked in an establishment smaller than the entire firm. It could be that the number 250 seemed large from their viewpoint. It could also be that the interviewer was not prepared to pursue the question of firm size with care.

The projected national totals given in the main body of the report in Tables 1.1, 2.1, and 2.2 are based upon projections from both the household and the registry sample. As can be seen from table D-1, the registry records were inadequate for the smallest size groups. The registry was marginally acceptable for the 50-251 size group.

Projection for the zero employee size group was taken from the household sample of 4,000 where data are available for 636 entrepreneurs. These households contained 9,789 persons age 15 or over. The national projection for zero employee firms is 636 times the ratio of national population age 15 and over of 40,809,592 to the number of persons in the 4,000 households age 15 and over of 9,789. The quotient of 4,169 is the projection factor. Each entrepreneur located in a household became the basis for 4,169 firms in the nation. This number could be refined by reducing the number observed in households to 593 rather than 636. This is because 492 of the entrepreneurs reported no full-time employees, while 143 reported one or more employees. An additional 101 zero employee firms were located from the registry sample. Tables 1.1, 2.1, and 2.2 in the main body of the report are based upon 636 zero employee firms. The product of 636 and 4,169 is 2,651,435 as reported. If we use the 593 as the basis, the product of 593 and 4,169 is 2,472,217 which might be an improvement over the previously reported figure, but is well within normal sampling error.

Projection for the 1-5 employee size group is based upon 124 employees in the sample. The projection factor remains 4,169 and the estimated employment is 516,947. Given the low occurrence and low discovery in the registry sample, there is no basis to offer an alternative to this number. The number of firms was not reported in the main body of the report for this size group. Based on the sample taken from the registry the mean number of employees in the 1-5 size group is 3.37. This number is “robust” as it is taken from 626 interviews with company managers. 516,947 divided by 3.37 gives 153,947 firms which is very close to the 148,976 reported in table 1.1 of the main report.

Projection for the 6-10 employee size group is based upon interviews of 204 household members. Projection by the factor of 4,169 gives an estimated total employment in the 6-10 employee size group of 850,476, the same as the 850,460 in table 1.1, allowing for rounding

error. The mean number of employees in firms of this size group using 524 interviews of company managers is 8.14 employees. 850,476 divided by 8.14 gives 104,481 firms in the 6-10 employee size group. This agrees with the 104,608 given in table 1.1 within normal rounding error.

Projection for the 11-50 employee size group is based upon 765 household interviews. The projection factor remains 4,169. The projected number of employees in the 11-50 employee size group is 3,189,285. This is within rounding error of the 3,189,226 employees in this size group reported in table 1.1 in the main body of this report. From 981 interviews with company officers or spokespersons the mean number of employees in the 11-50 employee size group is 25.95. Division of total employment by the average employee number gives 122,901 firms. This is within rounding error of the 123.757 originally reported in table 1.1.

Projection of employment in firms in the 51-250 employment size group could be made either from the household sample or from the registry sample. The household survey interviewed 1009 members employed in firms of 51-250 employees. Multiplied by the projection factor of 4,169 produces employment of 4,206,521 in this employment size group of firms. This compares closely with the 4,206,444 reported in Table 1.1. The average number of employees in the 51-250 employee size group is 125.05. Dividing the number of employees by 125.05 gives an estimate of 33,638 firms in the 51-250 employee size group. This compares closely with the 33,169 reported in Table 1.1. We note that over 80 percent of the records from the registry sample were reliable, so a check projection can be made from the registry to see how the estimates compare.

The registry sample reported 929 firms with employment between 51 and 250 persons. The average employment in this employment size group was 125.05. If we assume that the 28,338 records originally reported represent a measure of all valid records whether they could be sorted or not, we can develop an alternate estimate. 929 firms times the ratio of 28,338 to 929 times the average employment of 125.05 gives an estimate of 3,543,667 employees in the 51-250 employment size group. This is well below the 4,206,444 estimated from households. The calculation shows that registry coverage is approaching household estimates as firm size increases, but cannot be recommended for any but the largest size employment group

The projection of employment in firms of 250 or more employees is taken from the registry sample. While the registry originally stated that there were 10,851 firms with employment of 250 or more, the final sorting revealed only 10,269. If this were the entire number of firms, our use of 10,851 would represent an overestimate of 5.7 percent. But there is always the possibility that there were some large firms in the over 600,000 firms in the registry that could not be sorted by firm size. To put a lower estimate on the number of firms with 250 or more employees, we will use the lower figure 10,269. We can further reduce this by considering that 9.6 percent of the listed firms did not exist. This would lower the count to 9,283. Further examination of the registry sample revealed that 77 records or 4.5 percent of the sample were noncommercial. Removing this percentage gives a lower limit to the number of firms of 8,865. This is 18.3 percent lower than the 10,851 firms used in the projections in table 1.1, 2.1, and 2.2. But this number is far above the 5,011 large firms calculated from the household survey.

We are confident of the lower bound of 8,865 firms because the registry data was tested in the field. Names and addresses were verified. The loss of data was only the 9.6 and 4.5 percents discussed above. This is a lower bound because there may be many more large firms among the 600,000 records that could not be sorted by firm size. On this basis the household survey estimates for firms of over 250 employees and the employment these firms represent is rejected. The reader is left to choose between 10,851, 10,269, 9,283, and 8,865 as the number of very large firms. The employment associated with these numbers of firms at the rate of 905.22 employees per firm is 9,822,542 (the number in table 1.1), 9,295,704, 8,403,157, and 8,024,775. These are all well above the 4,535,789 that is projected from the household sample. Our choice for the largest of these numbers is due to the uncertainty associated with the 600,000 records that could not be sorted by firm size. The result is a conservative estimate of the relative importance of SMEs.